

# User Manual of Aqualentz® installations for

- harvesting of rainwater
- storm spillways, flow regulators
- accessories

**Economize by using Sotralentz Rainwater Harvesting systems...**  
**More than half of the national territory suffers from a growing and continuous lack of water resources. It is time to react by making a civic gesture by installing the Aqualentz range adapted to your needs**  
**Thank you in advance**



**SOTRALENTZ**  
**HABITAT**

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**You want to buy and install one of the AquaLentz rainwater systems (pre-treatment, harvesting, filtration, spillway, fire water storage, swimming pool supply, watering...).**  
**Read this booklet carefully, available with every unit, before any fitment or use of our Rainwater Harvesting devices, extra Rainwater Harvesting units and accessories. This book contains information concerning the description, installation, proper usage and maintenance of our Rainwater Harvesting devices, extra Rainwater Harvesting units and accessories.**



**Recuperated  
rainwater cycle  
in a house**

All information available on our site:  
[www.sotralentz.com](http://www.sotralentz.com), under the tab "Habitat", and link "Technical Documentation"

# Reasons why you should choose a Sotralentz system adapted to your needs and allowing you to really save money.

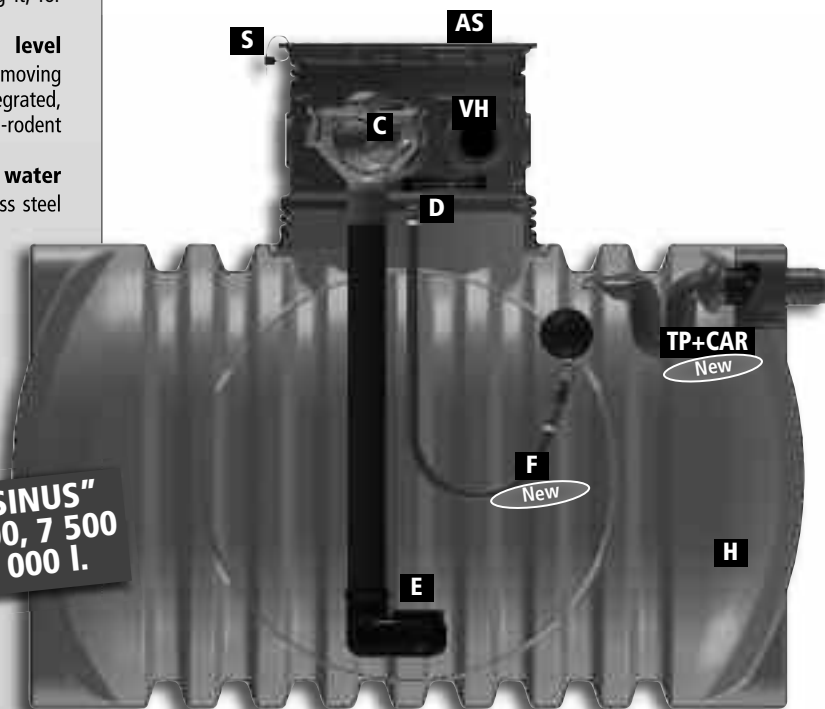
**Drinking water is becoming more costly, plan in advance by economizing on it.**

**Year on year, our water tables drop and stocks of drinking water dry up. It is important to economize our drinking water resources.**

**Rainwater is a gift from the sky; its use is advisable for watering and for certain household purposes after filtration. Close to 50 % of daily water needs can be met by using rainwater. The average consumption per head is about 130 litres per day, or 3 900 litres per month.**

1. **Complete range** of Rainwater Harvesting devices, single and double skinned devices from 2 500 to 50 000 litres, linkable on demand (low outlets as an option), extra units and accessories;
2. **Complete Rainwater Harvesting devices come with quality pre-equipped**, only needing to be connected for use and requiring little maintenance
3. **Underground Rainwater Harvesting devices, with three filtrations integrated, energy free**
  - 3.1 **Placement of empty unit**, without firstly filling up with water from the mains water network, first saving. Check the product technical booklet for before making your choice
  - 3.2 **Integrated grill filter "Sinus"** **C** integrated and detachable, tubular and horizontal filtering cartridge with « Vortex » effect, without energy requirements, placed upstream of store allowing:
    - access to the inside for all over cleaning of the cistern,
    - energy free filtration, without contacting cistern's interior,
    - harvesting close to 90 % of collected pre-filtered water,
    - ensuring an energy free auto-clean,
    - **backwashing** integrated into the filtering cartridge.
Plan to use a high flow, cascade grill particle filter VF1 for a roof surface area between 150 and 350 m<sup>2</sup> and roof sections of 350 m<sup>2</sup> for all cisterns or a VF2 filter per 850 m<sup>2</sup> section.
    - **Debris trap** **CA** (sold separately).
  - 3.3 **Connection equipment** **D** Ø 10 1" surface pump (option sold separately)
  - 3.4 **Calm water inlet, detachable, submerged and effective** **E** allowing pre-filtered water to arrive whilst avoiding the re-suspension of sand (sediments) coming from rains blown from sand deserts at the same time as stabilizing pH of container water by oxygenating it, for improved water quality preservation and cleanliness.
  - 3.5 **Overflow siphon sited above the evacuated water level** **TP+CAR** energy free filtration, because of the skimmer effect, removing greasy (hydrocarbons, oils...) & fine particles (pollen...), with integrated, accessible and washable anti-odour valve doubling as anti-rodent stainless steel grill (to avoid decomposition after drowning).
  - 3.6 **Flexible floating suction tube, joinable to a surface water pump** **F** filtration, equipped with a filtering strainer in stainless steel with an anti-siphon valve and a floater to avoid the suction of sludge and floating matter
  - 3.7 Screw-on riser 600/580 grey **AS** or black **AP** with
    - height adjustable with 1 maximum supplementary screw-on riser REHC 600/150 **guarantying a water level of - 1 meter** between the bottom of the pipe and the overflow water level
    - raw water inlet **IN**
    - conduit of dirty water without **OUT** going through the cistern
    - sleeve mounting point for the service pipe (electricity supply, rewashing, backwashing, gauge...)
    - slot for Upper Ventilation **VH**
    - access to inside for all over cleaning of the cistern.
    - waterproof conduit through the wall for **PME** the tube service (option sold separately).
  - 3.8 **PEHD cap**, insulated against the cold (frost) and the heat (bacterial formation, algae...), with an insulating air layer in the riser and reinforced in PEHD for safe transit above the device.
  - 3.9 **Child-safety device**, in stainless steel, **S** guarantying inaccessibility to children and to any person not equipped with the required tools to open this security device
  - 3.10 **White interior skin**, in PEHD both natural and food grade.
  - 3.11 **Marked with "eau non potable"** (water NOT for drinking) **MA** above each bolted decanting tap (supplied with each cistern).

**AT112 "SINUS"  
2500, 5000, 7 500  
and 10 000 l.**



# Reasons why you should choose a Sotralentz system adapted to your needs and allowing you to really save money.

## Needs

- Civic gesture in case of water shortage periods,
- Preservation of water resources (drop in water table),
- Respect for the environment (sport grounds, golf...),
- Economize (water flushes, washing machine...),
- Manage floods and rainfall (cut off if water courses are on flood alert ...),
- Fire prevention (store...),
- Improvement in quality of life (flowering displays...),

## Concerning you:

- **Domestic above ground & underground installations**  
Cisterns of quality, pre-equipped & adapted to the needs of private users (watering, pool filling, W-C, washing machine...)
- **Large size underground installations**  
Cisterns ultra resistant, pre-equipped, linkable if desired, with help from the manufacturer to meet the needs of collectives & enterprises (flowering displays, flood management, fire prevention, WC, cleaning, public gardens, sport grounds, golf...)

## How to choose a pre-equipped underground cistern?

- **Always check the technical manual before choosing the underground cistern that meets your needs.**
- **Prioritize:**
  - savings to be made and not price
  - cisterns made of Polyethylene (PE) as they are lighter & durable,
  - cisterns made of High Density Polyethylene (PEHD) fabricated by extrusion blowmoulding rather than rotational moulding (PEBD), as they are shock proof,
  - cisterns made of extrusion blowmoulding PEHD, as the multiple layering is highly resistant for placement of empty cistern & the integration of an food-grade interior lining, being the 1st economy,

## Favour the cistern with three (3) filtrations without integrated energy requirements:

1. **Tubular filtering cartridge** & horizontal integration, with the centrifuge effect, for 1st energy free filtration and the harvesting of close to 90 % of collected rainwater and ensuring energy free auto-cleaning,
2. **Overflow siphon** situated above the outflow water level for a 2nd energy free filtration of fatty (hydrocarbons, oils...) and fine particles (pollen...) by the skimmer effect, with anti-rodent grill in stainless steel (to avoid decomposition after drowning),

3. **Filtering strainer, integrated**, for a 3rd energy free filtration, because the floater avoids sucking up of floating or settled matter, with an integrated anti-siphon valve preventing the pump working whilst empty and for quick and easy connection to the pump

## Supplementary integrated equipment indispensable for Tax Credit eligibility

- Effective, calm water inlet allowing the arrival of pre-filtered water whilst avoiding the re-suspension of sand (sediments) at the same time as oxygenating the container water for improved water quality preservation and cleanliness.
- Screw-on riser with diameter minimum 600 mm with 1 supplementary riser enabling the placement of outlet water level to -1 meter below the finished ground level (guaranteed to retain a stable & fresh temperature to conserve container water quality)
- Screw-on riser equipped with:
  - Inlet for raw water coming from the roof,
  - Filtering cartridge, detachable and auto-cleaning, with an integrated backwashing system, accessible from the interior of the cistern,
  - Passage of dirty water (leaves, moss...) without coming into contact with the interior of the cistern,
  - Sleeve mounting point for connection of the service tube, integrating supply, suction, water level detector (from a distance)...
- Insulating, resistant cap of 600 mm in diameter and green colour to blend into the landscape, avoiding temperature variation in water contained in the cistern and thus preserving its quality,
- Before choosing any pre-equipped cisterns, without forgetting indispensable extra Rainwater Harvesting devices (Pumps, compact modules with network disconnection device, water level detector (from a distance), watering systems...), favour real user savings
- Aqualentz installations for the collect and use of rainwater respect several technical rules to reduce all risk of accident (drowning...) due to their "child safety" devices, integrated and in stainless steel, and all health risks during connection use.
- Marked "Ne convient pas pour l'eau potable" « water NOT for drinking »
- Non-return valve on overflow siphon.
- Debris trap on the downspout (option sold separately).

## Sotralentz pays particular attention to the:

- materials used in installations for collect and use (the inert and recyclable material, PEHD),
- presence of a device passing dirty water through a strainer and successive filtrations,
- recommendations of fitment and maintenance of installations

# Key of pictograms used in this brochure to help you make your choice



Exterior uses, watering small areas, small swimming pools



Interior uses, rinsing toilets



Fire water reserve if the network is insufficient



Processed water



Exterior uses, watering large areas, community, business, private use, small swimming pools, etc.



Interior uses, washing clothes after filtering (indispensable)



Pre-filtration and filtration of rainwater



Exterior and interior uses, cleaning floors



Regulating the flow of water to the network



Hydrosystem, recovery of soiled rainwater

# Conditions of Use

SOTRALENTZ Rainwater Harvesting devices are destined for:

- above ground or underground installation
- inside or outside placement, treated against UV

SOTRALENTZ-HABITAT equally offers a range of extra Rainwater Harvesting units and accessories, for rainwater collection and flow control (see brochure EP68).

## 1 – It is forbidden to eject the following products into conduits channelling rainwater,:

- oils, grease (engine, frying...),
- waxes and resins,
- paint and solvents,
- petroleum products,
- pesticides of all types,
- all toxic products,
- any object that decays slowly (cigarette ends, sanitary pads, tampons, condoms, cinders, household waste, tissue, wrapping, etc.),
- condensation water from gas heater outlets of low and average temperature
- condensation water from air conditioning units, dehumidifiers

## 2 - It is forbidden:

- to cover or bury the caps on Rainwater Harvesting devices.
- to plant trees or large plantations within least 3 meters from Rainwater Harvesting devices.
- to connect any soil siphon.

## 3 – It is recommended:

- to check cleanliness of above ground and underground cisterns,
- to ensure no algae is forming,
- to check deposit levels at the bottom of above ground and underground cisterns,
- to check cleanliness of filtering cartridges, collectors, Rainus filters, Sinus filters and High Flow VF1 filters,
- to ensure the overflow siphon and its outlet are not clogged or sealed by rodents,
- to ensure Ph stability of stored water destined for domestic use.
- to fit the specialized upstream filtration, Hydrosystem, when roofs are made of zinc, copper...

If checks effectuated should confirm one of the above points, please refer to our maintenance recommendations.

## Why save rainwater?

Because 60% of the country suffers from:

- lack of fresh water
- water-table not recharged in winter
- drop in average level of watercourses

Confirmation of points above by the Minster for Ecology and Sustainable Development.

- because the price per m<sup>3</sup> of water increases each year

## What quantity can be harvested?

Globally, the rain falls at same amount in France. However, precipitations are more or less heavy and more or less frequent, depending on the region. For example, it rains less often, but more heavily in the South-West than in the North.

- Capacity of water harvesting per year, for a house with a footprint of 100m<sup>2</sup>, between 50 and 70m<sup>3</sup>, enabling an annual saving of 50m<sup>3</sup> minimum.
- Even during the least wet month, possibility to harvest from 30 to 40l per m<sup>2</sup> of roof, or: 1 m<sup>3</sup> of water for 25 m<sup>2</sup> of roof.

## Use our technical manual EP24 to help you choose the right rainwater harvesting system

- Underground placement of empty storage enables both real storage capacity and savings to be made
- Choose a pre-fitted storage without forgetting the indispensable extra rainwater harvesting units (pumps for exterior use or compact modules for interior use, with an obligatory mains network disconnection device, water level detectors (from a distance), watering systems) to make real savings
- Choose the pump or Compact Water Management Module to suit the required manometrically-measured lift height, the area to water and other equipment to supply.
- Do not attach a standard pump.

## How to choose a pre-equipped underground storage?

Favour:

- Pre-fitted storage without pump enabling placement of empty unit
- Savings to be made and not the price,
- Storage tanks made with shock resistant High Density Polyethylene (HDPE),
- Storage tanks made of extrusion blowmoulding HDPE, as multiple layering is extremely resistant for placement of the empty unit and the integration of a food-grade interior being the first saving
- Control modules that conform to current regulation
- Surface pumps suitable for the required head pressure, the watering area desired, the maximum distance to cover, other envisaged uses etc., not without forgetting the required mains network backflow prevention device.

## Quality Assurance ISO 9001 : 2008



**All SOTRALENTZ-HABITAT Rainwater Harvesting devices, extra Rainwater Harvesting units and accessories are designed and produced under quality assurance ISO 9001: 2008**



# Rainwater Guarantee

## Rainwater Harvesting devices, extra units and accessories

Rainwater Harvesting devices, extra units and accessories must be transported, stored and handled in conditions such as to avoid acts, notably mechanical acts, incurring damage.

We guarantee to furnish Rainwater Harvesting devices (cisterns, except accessories) that conform to current regulation laws and are exempt from any fabrication fault for a period of ten (10) ans.

We guarantee to furnish cistern facilities, additional Rainwater Harvesting units and accessories exempt from any fabrication fault (not including wear) for a period of two (2) ans.

In case of product defect recognized as such by our services, our intervention is limited to the replacement of faulty parts (that must be kept at our disposal) or missing parts (reserved with receipt or delivery slip of the delivery firm sent by signed recorded delivery under 72 hours, 3 working days, including Saturday), at the exclusion of any other costs.

## Inspection chambers (rainwater)

Inspection chambers must be transported, stored and handled in conditions such as to avoid acts, notably mechanical acts, incurring damage.

We guarantee, by the adhesive description band, to furnish complete chambers, conforming to current regulation laws and exempt from any fabrication fault

In case of product defect recognized as such by our services, or incomplete chambers, our intervention is limited to the replacement of faulty parts (must be kept at our disposal) or missing parts (reserved with receipt or delivery slip of the delivery firm sent by signed recorded delivery under 72 hours, 3 working days, including Saturday), at the exclusion of any other costs

## 10 year responsibility = 10 year guarantee

From law 78/12 (01.01.1978), professional responsibility of fabrications and assimilated construction materials by the assurance police Act IARD

## 2 year guarantee

For all accessories and extra Rainwater Harvesting units, not including UV filtration.

## 1 year guarantee

For all UV filtration devices

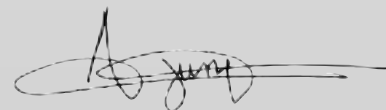
Signed in DRULINGEN, the  
(see serial number and fabrication date perforated below)

Installer

Owner

User

Constructor



A. Jung

## Recourse under warranty cannot be invoked in the following cases:

- **Non-respect** by the installer, the owner and/or the user of
  - recommendations of storage and handling
  - recommendations of transport
  - recommendations of installation
  - recommendations of proper use
  - recommendations of maintenancethat SOTRALENTZ-HABITAT specifies in the booklet EP23 and delivered with every rainwater harvesting device
- **Non-respect by the installer, the owner and/or the user of the following**
  - decree of 21 August 2008, JO n° 5 of 29 August 2008
  - decree of 3 October 2008, JO n° 4 of 18.10.2008
  - decree of 17 December 2008, JO n° 28 of 25.12. 2008
- **Modification or use** of Rainwater Harvesting devices and accessories and/or and Rainwater Harvesting units **for a purpose other than that initially envisaged** by SOTRALENTZ-HABITAT,
- **Acts of nature** (weather and geological phenomena, explosions or dynamite...) outside of our control,
- **Poor adjustment** of Rainwater Harvesting devices, units and accessories
- **Poor choice of system**, partial or complete
- **Non-use of the adapted downstream filtration** of functioning Rainwater Harvesting devices in relation to:
  - Rainwater Harvesting devices connected
  - The rules in effect

# Maintenance

## Underground cisterns

### It is recommended to

- check cleanliness of underground cisterns,
- ensure no algae have formed,
- check level of deposits on the bottom of underground cisterns,
- check cleanliness of Rainus grill filters, Sinus grill filters and cascade High Flow VF1 grill filters,
- ensure the overflow siphon and outlet are not clogged or blocked by rodents,
- ensure Ph stability of the stored water if using for domestic purposes



### It is obligatory:

- to open all cistern caps before cleaning to ventilate the cistern

### Single Skin Cisterns

#### EP SP-SZ and EP AT 112

- Clean Sinus grill filter and/or cascade High Flow VF1 grill filter and/or any other filter installed upstream twice a year during dry spells,
- Clean overflow siphon twice a year during dry spells,
- Suck up any significant amounts of accumulated deposits from the bottom,
- Stabilize water Ph if using for domestic purposes (with kit pool Ph ...), test the Ph and, if necessary, add the appropriate product Ph+ or Ph-,
- Where water quality is poor, do not hesitate to pre-treat with activated oxygen. If this pre-treatment fails, drain the cistern and clean the insides and accessories with a water jet,
- In the above case, before refilling with water, ensure upstream filtration devices are sufficient for the stored volume as well as the roof surface area. Where filtration is insufficient, install correct filters, sold separately,
- After all checks or cleaning operation, ensure caps are firmly closed to avoid all risk of accident and pollution

#### Double Skin Cisterns EP DP-RKT

- clean Sinus grill filter and/or cascade High Flow VF1, VF1 TWIN or VF2 grill filter and/or any other filter installed upstream twice a year during dry spells,
- Clean overflow siphon twice a year during dry spells,
- Suck up any significant amounts of accumulated deposits from the bottom,
- Check and clean pipes linking cisterns,
- Stabilize water Ph if using for domestic purposes (with kit pool Ph ...), test the Ph and, if necessary, add the appropriate product Ph+ or Ph-,
- Where water quality is poor, do not hesitate to pre-treat with activated oxygen. If this pre-treatment fails, drain the cistern and clean the insides and accessories with a water jet,
- In the above case, before refilling with water, ensure upstream filtration devices are sufficient for the stored volume as well as the roof surface area. Where filtration is insufficient, install correct filters, sold separately,
- After all checks or cleaning operation, ensure caps are firmly closed to avoid all risk of accident and pollution.

### Storm spillways, flow regulators

#### Single Skin EP-DEV SP-SZ

#### and Double Skin EP-DEV DP-RKT

- It is advised to install a grill upstream of a spillway to collect large detritus or elements that can obstruct the inlet of the spillway,
- To prevent damage from summer storms, check the general state of the spillway's interior once a month, removing as necessary any element preventing the proper flow of water,
- Clean inlet and outlet devices and overflow siphon twice a year during dry spells
- Suck up any significant amounts of accumulated deposits from the bottom,
- After all checks or cleaning operation, ensure caps are firmly closed to avoid all risk of accident and pollution.

## Above ground cisterns

### It is recommended to:

- check cleanliness of above ground cisterns,
- ensure no algae have formed,
- check level of deposits on the bottom of underground cisterns,
- check cleanliness of the filtering cartridges of the collectors and Rainus grill filters,
- ensure the overflow siphon and outlet are not clogged or blocked by rodents,
- ensure Ph stability of the stored water if using for domestic purposes.

### External cisterns AquaVario treated with UV protection,

#### ST XT, Conical and Container tank 1 000 litres

- Clean all filter installed upstream or on the cistern twice a year during dry spells,
- In winter turn the filter to the closed position and turn the filter to the open position in spring through to autumn,
- Suck up any significant amounts of accumulated deposits from the bottom,
- Stabilize water Ph if using for domestic purposes (with kit pool Ph ...), test the Ph and, if necessary, add the appropriate product Ph+ or Ph-,
- Where water quality is poor, do not hesitate to pre-treat with activated oxygen. If this pre-treatment fails, drain the cistern and clean the insides and accessories with a water jet,
- In the above case, before refilling with water, ensure upstream filtration devices are sufficient for the stored volume as well as the roof surface area. Where filtration is insufficient, install correct filters, sold separately,
- After all checks or cleaning operation, ensure caps are firmly closed to avoid all risk of accident and pollution.

### ST cistern for the interior

- Clean all filter installed upstream twice a year during dry spells,
- In winter turn the filter to the closed position and turn the filter to the open position in spring through to autumn,
- Suck up any significant amounts of accumulated deposits from the bottom,
- Stabilize water Ph if using for domestic purposes (with kit pool Ph ...), test the Ph and, if necessary, add the appropriate product Ph+ or Ph-,
- Where water quality is poor, do not hesitate to pre-treat with activated oxygen. If this pre-treatment fails, drain the cistern and clean the insides and accessories with a water jet,
- In the above case, before refilling with water, ensure upstream filtration devices are sufficient for the stored volume as well as the roof surface area. Where filtration is insufficient, install correct filters, sold separately,
- After all checks or cleaning operation, ensure caps are firmly closed to avoid all risk of accident and pollution.

### Semi-buried tank cladding

- Clean all filter installed upstream twice a year during dry spells,
- In winter turn the filter to the closed position and turn the filter to the open position in spring through to autumn,
- Suck up any significant amounts of accumulated deposits from the bottom,
- Stabilize water Ph if using for domestic purposes (with kit pool Ph ...), test the Ph and, if necessary, add the appropriate product Ph+ or Ph-,
- Where water quality is poor, do not hesitate to pre-treat with activated oxygen. If this pre-treatment fails, drain the cistern and clean the insides and accessories with a water jet,
- In the above case, before refilling with water, ensure upstream filtration devices are sufficient for the stored volume as well as the roof surface area. Where filtration is insufficient, install correct filters, sold separately,
- Clean tank cladding at the end of autumn, by clearing out dead leaves,
- Remove the submerged pump at the end of autumn until spring,
- After all checks or cleaning operation, ensure caps are firmly closed to avoid all risk of accident and pollution.

# Maintenance

The various elements of above and underground rainwater harvesting systems must be inspected and maintained following the instructions of the manufacturer.  
Outline guidance for the more common operations as follows:

The frequency of checks can be altered according to the conditions of use

| Element of the system                                     | Nature of the operation  | Regularity of check  | Maintenance  |
|---|--|--|--|
| <b>Gutters</b>  | Check flow of water and water-tightness  | 6 months   | Where necessary                                    |
| <b>Downpipes</b>  | Check flow of water and water-tightness  | 6 months   | Where necessary                                    |
| <b>filtration systems upstream of storage</b>             | Check cleanliness  | 6 months   | As specified by the manufacturer                   |
| <b>Underground storage tanks</b>                          | Check cleanliness and water-tightness, Empty water and deposits, clean inside            | 6 months   | Where necessary                                    |
| <b>Surface storage tanks</b>                              | Check cleanliness, water-tightness, and solidity, empty water and deposits, clean inside | 6 months   | Where necessary                                    |
| <b>Siphon overflow</b>                                    | Check flow   | 6 months   | Where necessary                                    |
| <b>Pump</b>   | Check in good working order and water-tightness  | 6 months   | As specified by the manufacturer                   |
| <b>Command box</b>  | Check in good working order  | 6 months   | As specified by the manufacturer                   |
| <b>Partitioning of rainwater and mains water networks</b> | Check cut-off valve in good working order  | 6 months   | As specified by the manufacturer                   |
| <b>Water level indicator</b>                              | Check the reading corresponds to the level in the tank                                   | 12 months  |  |
| <b>Pipework</b>   | Check condition and water-tightness  | 6 month  |  |
| <b>Water meters</b>                                       | Check the water meters monthly<br>Check in good working order and water-tightness        | 1 mois pour le relevé des consommations, l'étanchéité et le fonctionnement |  |
| <b>Drainage taps</b>                                      | Check water-tightness and lock   | 12 months  |  |
| <b>Filtration between storage and washing machine</b>     | Check cleanliness and efficacy of filter   | 6 months   | As specified by the manufacturer                   |
| <b>Filtering with meshes and activated charcoal</b>       | Check for blockages and that jars are watertight   | 3 months   | Change the meshes and activated charcoal           |
| <b>UV filters</b>   | Check they are watertight and work correctly   | 12 months or 9 000 hours   | Change the UV lamp                                 |
| <b>HYDROSYSTEM</b>  | Check for blockages in the filter modules and in the settling tank                       | 12 months  | Change the filter modules, drain off settled waste |

**To be completed without fail as prescribed by the current regulations**





# Health and Safety booklet

Notably including:

- The name and address of the person or body in charge of maintenance
- A plan of the system for rainwater harvesting, showing the pipes and the transfer taps for the rainwater distribution network and the drinking water network, as they provide for the occupants of the building).
- A start-up sheet (see fig X.) stating the conformity of the installation with current regulations, delivered by the person responsible for starting up the installation.
- The date of checks done and the details of maintenance carried out (see § 10 table Y).
- A monthly record of the measurements for the volume of rainwater used inside the building connected to the public sewage network.

This booklet belongs to .....  
(Person or body in charge of maintenance)

Address of the owner: .....  
.....  
.....

Phone number of the owner: .....

| Date | Consumption of rainwater inside the building | Units monitored | Actions taken | Observations | Person responsible for the operation Name and signature |
|------|--|-----------------|---------------|--------------|---|
|      |  |                 |               |              |   |
|      |  |                 |               |              |   |
|      |  |                 |               |              |   |
|      |  |                 |               |              |   |

## Form of conformity to fill in at start-up

Details of the owner of the installation: .....

Address of the installation: .....  
.....

Start-up performed by: .....  
.....

Business address: .....  
.....

Contacts telephone numbers: .....

Other observations by the person responsible for the installation: .....  
.....

Other observations from the owner: .....  
.....

The necessary instructions for the operation of the system have been given; all the technical documents required and all the existing service and maintenance documents following the list have been provided.

By signing here, I..... The person responsible for putting the installation into operation (or his representative), state that the installation conforms with the current regulations pertaining to the design of rain water harvesting installations, the subsequent distribution of said water to the public, the indoors pipe network and the points of use.

Signed at ..... Date.....

Stamp

Signature

| Elements to check (conformity to regulations)   | Check performed (to tick) | Any observations |
|---|---------------------------|------------------|
| Type of roof .....  | <input type="checkbox"/>  |                  |
| Filtration upstream of the storage tanks  | <input type="checkbox"/>  |                  |
| Rain water storage tanks  |                           |                  |
| Material .....  |                           |                  |
| Water-tightness   | <input type="checkbox"/>  |                  |
| Protection of air vent against insects entry  | <input type="checkbox"/>  |                  |
| Arrival of water at the low point   | <input type="checkbox"/>  |                  |
| Secure access   | <input type="checkbox"/>  |                  |
| Easy of clean   | <input type="checkbox"/>  |                  |
| Storage tank over-flow  | <input type="checkbox"/>  |                  |
| Sufficient discharge capacity   | <input type="checkbox"/>  |                  |
| Anti-mosquito grill   | <input type="checkbox"/>  |                  |
| Does the overflow connect to a waste-water network  | <input type="checkbox"/>  |                  |
| Non-return valve  | <input type="checkbox"/>  |                  |
| Absence of connection to drinking water network   | <input type="checkbox"/>  |                  |
| Notably in the case of a back-up water supply   |                           |                  |
| Disconnection leading to automatic overflow   |                           |                  |
| Indoor pipes are marked as containing rain water  | <input type="checkbox"/>  |                  |
| Usage points are marked as delivering rain water  | <input type="checkbox"/>  |                  |
| Drain-off taps (lockable)   | <input type="checkbox"/>  |                  |
| Rain water usage: absence of indoors uses other than evacuation of excreta and washing of floors (absence of branching onto the rain water network) | <input type="checkbox"/>  |                  |
| In the case of a building connected to mains sewage: presence of a system to measure the volume of rain water used in the building                  | <input type="checkbox"/>  |                  |

# Choosing sizes of rainwater recuperation installations

## Determining site potential

### Environment of site

Rules in effect (decree 21st August 2008) restrict rainwater recuperation. Roofs must be inaccessible, composed of neither asbestos nor lead. The immediate surroundings of the rainwater recuperation site must be taken into account as these could be a detrimental factor in rainwater quality (presence of smoke-emitting factories, areas where pesticides are sprayed, bird migration passages...)

### Characteristics of rainfall

Where water needs are constant, it is better to choose areas where rainfall is regular all through the year, with low incidence of maximum rainfall intensity. Otherwise, these conditions will lead to a reduction in rainwater collection.

Choosing volume sizes for rainwater storage

### Generally

The aim of selecting volume sizes for rainwater storage is an optimisation of volume relative to the quantity of rainfall and to consumer needs.

A simplified method of selecting sizes is outlined for detached, principal residences using rainwater for the WC and, on a trial basis, for the washing machine.

An intermediate method is an extension of the simplified method and includes detached houses using rainwater on the exterior (mainly watering)

The detailed method covers cases where the rainwater demand fluctuates and/or where rainfall is irregular.

### Parameters linked to demand

#### Domestic rainwater needs, by usage

Actual user consumption should be taken into account for correct size choice. For your information, the average French domestic consumption of potable water was estimated at 137 litres per inhabitant, per day (Bibliography: Etude CIEau, 2007).

## Parameters linked to collection capacity

### Gross catchment area and useful catchment area of the roof.

The catchment area is the effective surface area connected to the rainwater recuperation cistern. The gross catchment area, expressed in m<sup>2</sup>, is calculated, by extension, from the area of the ground floor, this figure is increased where there are eaves on the building. This area is thus independent of the form, material and slope of the roof.

These three latter parameters are expressed in a coefficient of loss, "Runoff" (no units), and is less than or equal to 1

The useful catchment area of the roof, expressed in m<sup>2</sup>, is the gross catchment area multiplied by the Runoff coefficient.

It is the useful catchment area of the roof that will be used in all following methods to calculate correct storage volume sizes

### Simplified method

The simplified method is used when individual domestic needs are relatively well known (water feeds to WC's, water feeds to washing machines, on a trial basis).

### Estimation of dry periods

The dry period (in days) characteristic for the place can be estimated with the following table.

Estimating needs based on daily consumption of domestic units (WV and, on a trial basis, washing machines) per user

Rainwater needs can be calculated as follows.

Needs = daily consumption \* n \* 365 days

### Estimating the collection capacity of the roof

The collection capacity of the roof is determined by the useful roof catchment area and average annual rainfall in the local.

Collection capacity is determined in the following way:

Capacity = Runoff coeff \* area \* av. annual rainfall

### Estimating the useful rainwater storage volume

Once a households rainwater needs and the roofs collection capacity have been estimated, the cisterns useful storage volume, in m<sup>3</sup>, can be determined with the following formula:

Useful volume = capacity \* length of dry period / 365

### Intermediate method

In addition to WC and washing machine needs, the intermediate method takes watering, car and floor washing needs into account

## Rainwater demands - what volume to store ?

| Uses   | Volumes to store     | Useful area of roof      |
|--|----------------------|--------------------------|
| <b>Watering &lt; 50 m<sup>2</sup></b>                                    | 150 to 500 litres    | Up to 40 m <sup>2</sup>  |
| <b>Watering &gt; 50 m<sup>2</sup></b>                                    | 500 to 1 500 litres  | Up to 80 m <sup>2</sup>  |
| <b>Watering &gt; 50 m<sup>2</sup> &amp; washing</b>                      | 1500 to 3000 litres  | About 100 m <sup>2</sup> |
| <b>Watering &gt; 50 m<sup>2</sup>, washing &amp; supplementary basin</b> | 3000 to 5000 litres  | About 150 m <sup>2</sup> |
| <b>Retention E.P. for said uses in the house</b>                         | 6000 to 9000 litres  | About 250 m <sup>2</sup> |
| <b>Retention E.P. regulation of downpours</b>                            | 9000 litres and more | From 300 m <sup>2</sup>  |

Approximate values.

This table helps you choose the unit most suitable for your needs

# Using rainwater in a washing machine

Special treatment of rainwater is necessary when it is used in a washing machine. The rainwater must be cleaned of suspended materials and be bacteriologically acceptable.

The main stage of sewage treatment is a filtration of bodies over 5 microns upon exiting the pump so as to remove suspended materials. In order to correctly size the filtration system, it is necessary to take into account the technical document of the manufacturer and to allow for the reduction in a filter's maximal load as a function of flow-rate.

It is recommended to install a supplementary disinfection system. In general terms this will be:

An ultra-violet mechanism delivering a beam of 40 mJ/cm<sup>2</sup> (EN 14897) with a system to measure the beam, which will stop the inflow of water in case of failure of the UV lamp.

Or, a pump which doses rainwater with bleach to a level of 0.2-0.5 ppm of free chlorine (except if this treatment has already occurred in the rainwater storage tank)

Or, a ultra-filtration system, comprising a physical barrier to bacteria and viruses. The system must be equipped with a means to measure membrane integrity.

It will be necessary to add an active carbon filter prior to using the washing machine in order to avoid all risks of odours and/or overdosing of chlorine, which may have negative consequences for the colours of textiles (decolouration etc.)

Each of these technologies can be used in isolation or in series for maximal security.



## Warning label Kit

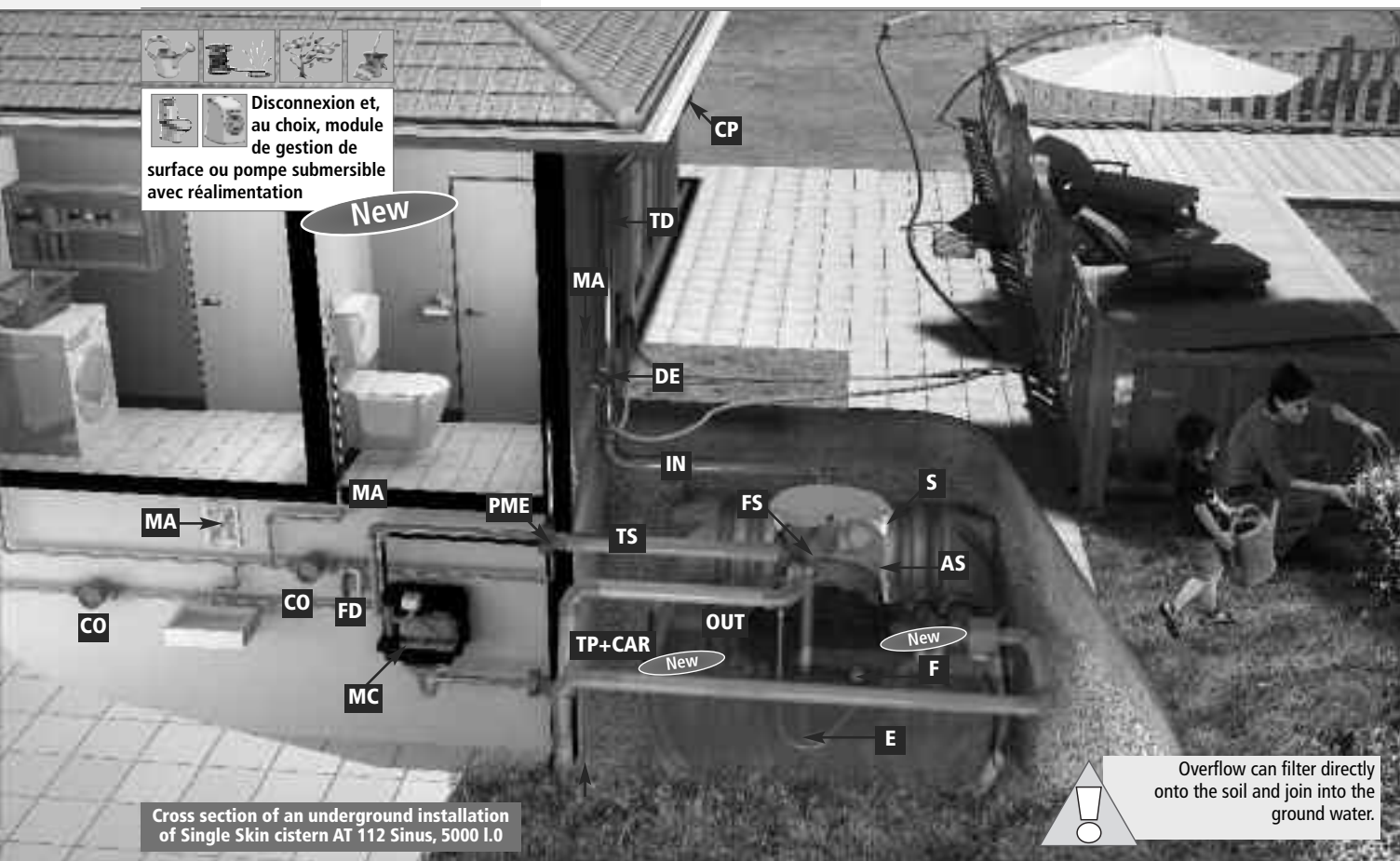
Article 33837

Kit contains:

- 4 stickers « Eau non potable » (water NOT for drinking)
- 1 sticker with pictogram  
« Eau non potable » (water NOT for drinking)
- 1 PE plate « Eau non potable » (water NOT for drinking)
- 1 PE plate « Attention, bâtiment équipé d'une installation eau de pluie » (Caution, building equipped with a rainwater facility)
- 10m of warning tape « Eau non potable » (water NOT for drinking), for burying



# Underground Rainwater Harvesting installation



Cross section of an underground installation of Single Skin cistern AT 112 Sinus, 5000 l.0

**AS** Screw-on riser REHC 600/580 with reinforced cap, green insulation and integrated child-safety,

**E** Integrated calm water inlet,

**F** Floating strainer with anti-siphoning,

**TP+CAR** non-return valve, accessible and washable, doubling as anti-rodent grill on the outlet of the overflow skimmer siphon.

**CO** Water meter (sold separately),

**CP** Debris trap (sold separately),

**DE** Distribution of non-drinking water,

**FD** Liquid centrifuge filter NW25 DUO with pre-filtration to capture particles and protect the downstream installation (sold separately),

**FS** Grill Sinus filter removable, with integrated backwashing

**IN** Inlet of filtered water into the tank

**MA** Marking eau non potable (water NOT for drinking) above each bolted decanting tap, and on water feed pipes (supplied with each cistern),

**MC** Compact Control Module EP with a network disconnection device,

**OUT** Outflow of dirty water not passing through

the interior of the cistern,

**PME** Watertight wall conduit for the service tube, to avoid sub-soil flooding risks (sold separately),

**S** Child-safety device in stainless steel,

**SI** Overflow siphon, flow regulator

**TD** Downpipe of gutter,

**TI** Integrated calm water inlet,

**TP** Overflow directed towards infiltration or collector,

**TS** Service pipe between cistern, Control module EP, pump, gauge, backwashing and electricity supply.

## Kit for 2 years filtration and treatment Cintropur® NW 25 Duo



**Kit for 2 years filtration and treatment Cintropur® NW 25 Duo:**  
article 33638

Terminology:

- 2 x 5 sieve filters 25µ: art.32623
- 1 x NW25 DUO Filter+Treat. DOM: art.32626
- 1 x stainless steel wall fixing: art.32628
- 1 x 3.4l activated carbon: art.32640
- 1 x box 585 x 385 x 220: art.33666
- Total weight of kit 6.5kg



All details on  
pages 71 to 75

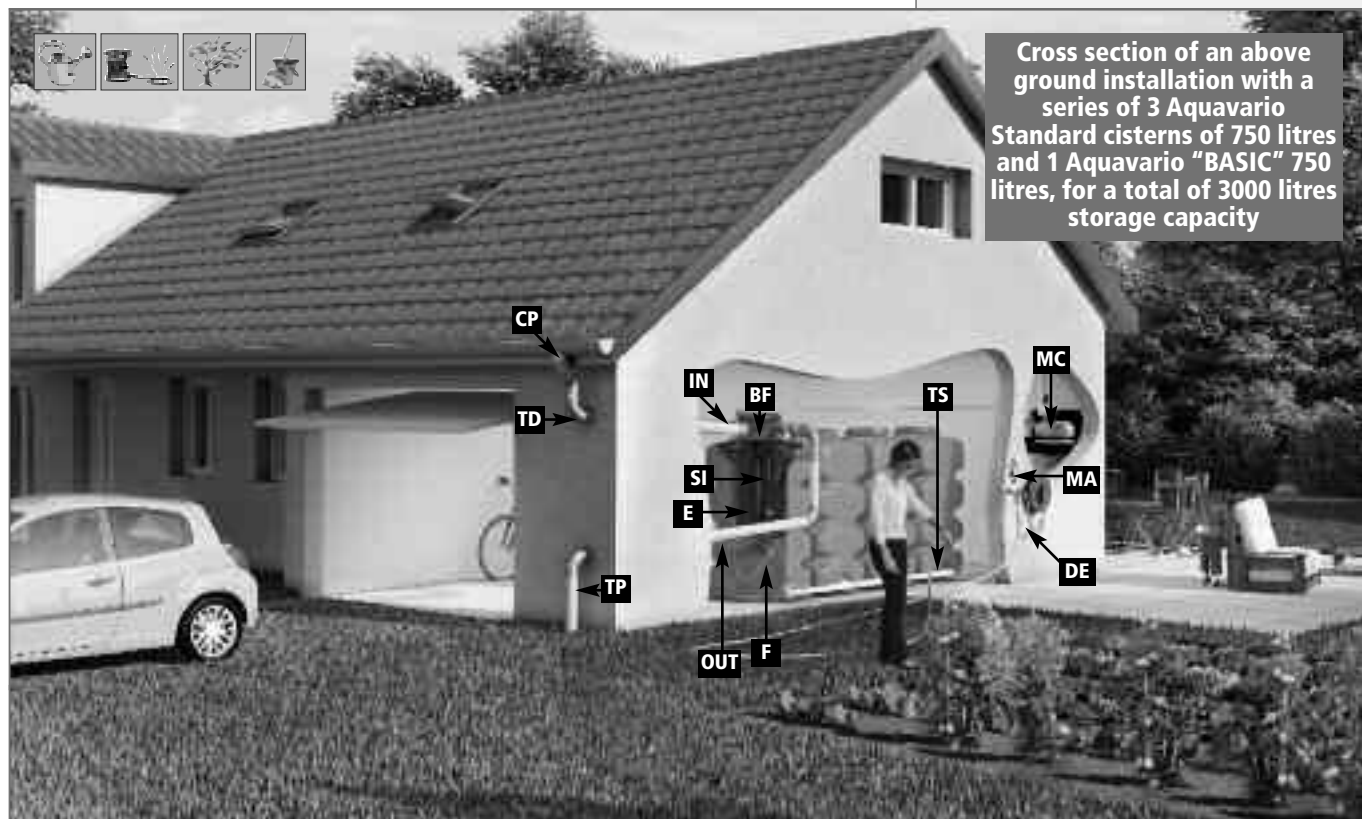


**ATTENTION**

Important: This device does not render water drinkable



# Above ground Rainwater Harvesting system



Cross section of an above ground installation with a series of 3 Aquavario Standard cisterns of 750 litres and 1 Aquavario "BASIC" 750 litres, for a total of 3000 litres storage capacity

- BF** Removable grill filter "BFiltre"
- CP** Debris trap (sold separately),
- DE** Distribution of non-drinking water,
- E** Integrated calm water inlet,
- F** Floating strainer with anti-siphoning,
- IN** Inlet of filtered water into the tank

- MA** Marking eau non potable (water NOT for drinking) above each bolted decanting tap, and on water feed pipes (supplied with each cistern),
- MC** Compact Control Module EP controlling main water and back up water feed with a network disconnection device,
- OUT** Outflow of dirty water not passing through the interior of the cistern,

- SI** Overflow siphon, flow regulator
- TD** Downpipe of gutter,
- TP** Overflow towards infiltration or cistern,
- TS** Service pipe between cisterns, Control module EP, pump, gauge, backwashing and electricity supply

## Warning label Kit

(Art. 33837)



Kit contains:

- 4 stickers « Eau non potable » (water NOT for drinking)
- 1 sticker with pictogram « Eau non potable » (water NOT for drinking)
- 1 PE plate « Eau non potable » (water NOT for drinking)
- 1 PE plate « Attention, bâtiment équipé d'une installation eau de pluie » (Caution, building equipped with a rainwater facility)
- 10m of warning tape « Eau non potable » (water NOT for drinking), for burying



For all installations of containers, cisterns or accessories :

- you must consult our user manual Rainwater Harvesting EP23 supplied with every unit,
- strictly follow our installation and maintenance advice
- ensure a qualified fitter installs your system

## Decanting Kit

(Art. 31691)

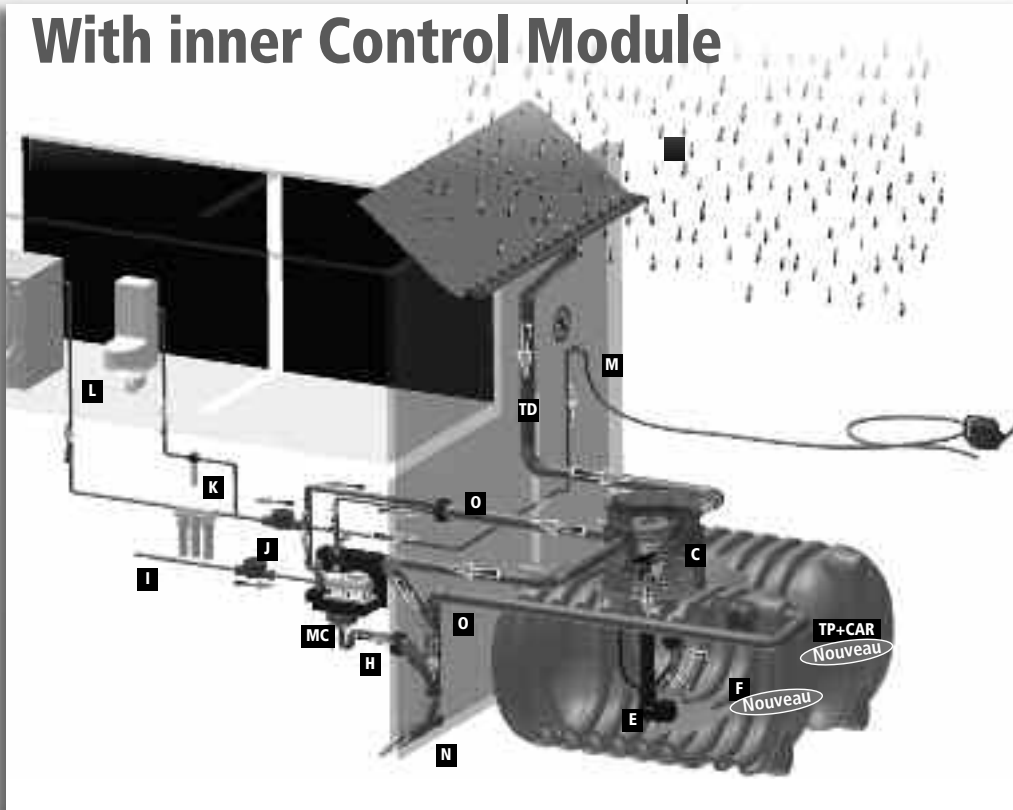
- Small box for ground placement (Ø 15 cm )
- Connexion to hosepipe
- 15 m PE pipe





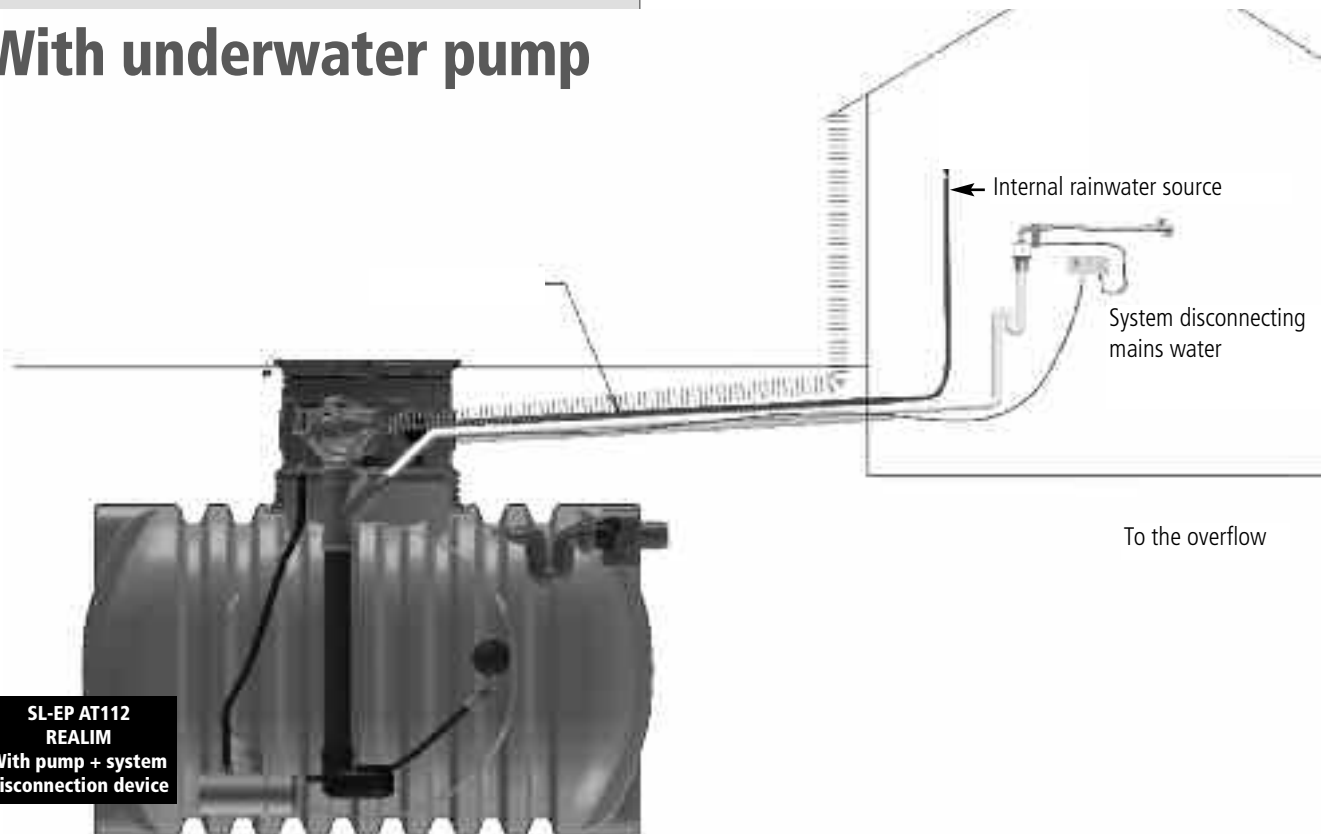
# Rainwater cycle

## With inner Control Module



- A** Gutting recuperating water from the roof surface
- C** View of the filter (Sinus)
- E** Transit through the calm-water inlet.
- F** Filtering strainer sucks water in the storage (here an underground AT112)
- MC** Control Module with network disconnection
- H** Drainage point of Control Module to the drainage pipe
- I** Mains water connexion
- J** Water meters
- K** Cintropur filtration NW 250 Duo
- L** Feed to flush and washing machine
- M** Watering and external use
- N** Drainage pipe
- O** Watertight wall conduit
- TD** Downpipe leading to the filter (Sinus)
- TP+CAR** non-return valve, accessible and washable, doubling as anti-rodent grill on the outlet of the overflow skimmer siphon.

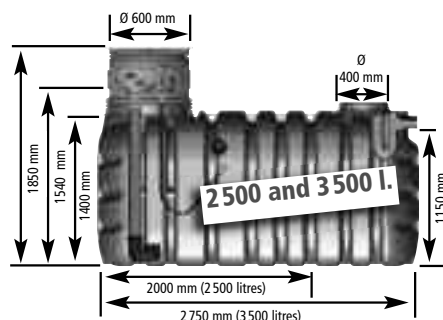
## With underwater pump



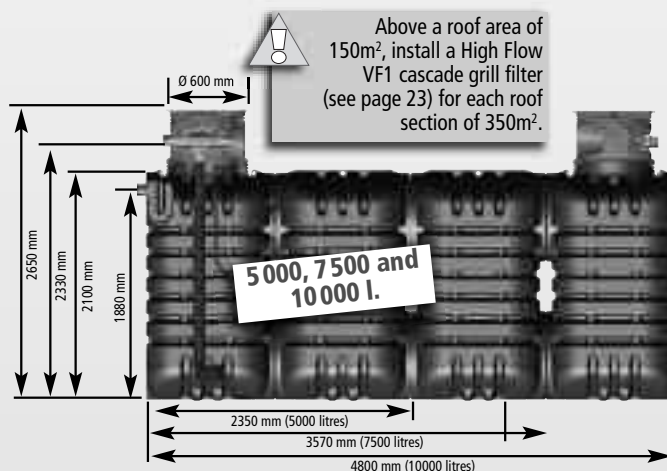
**SL-EP AT112  
REALIM**  
With pump + system  
disconnection device

# Dimensions of underground SP, AT and DP cisterns

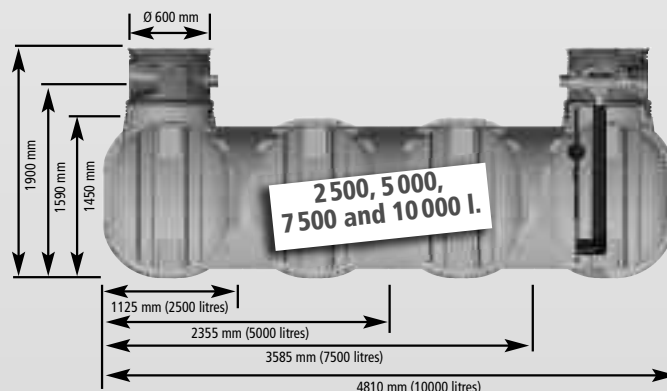
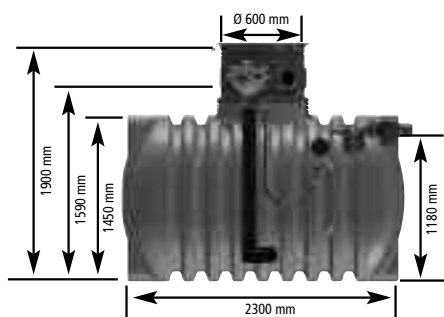
## Single Skin SP-SZ (black) with screw-on riser REHC 600/580 grey or black and reinforced cap (green)



## Single Skin SP-SZ (black) with screw-on riser REHC 600/580 grey or black and reinforced cap (green)



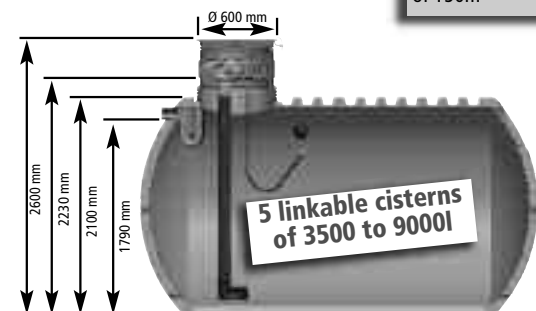
## Single Skin AT 112 (blue) with exclusively screw-on riser REHC 600/580 grey and reinforced cap (green)



## Double Skin DP-RKT (blue) with screw-on riser 600/580 grey and reinforced cap (green)

Imperative to validate the DP cisterns and their sides with our technical service before excavation or placing distribution slab

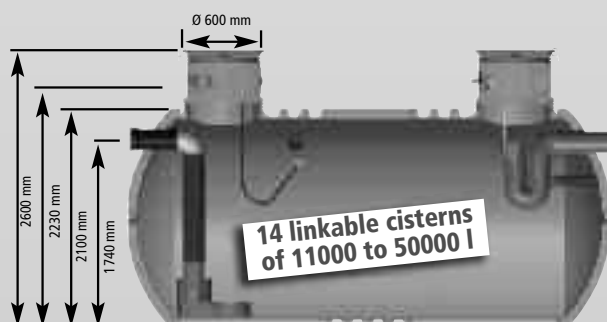
Sinus filter, uniquely integrated in all cisterns up to 9000 l and for a roof surface of 150m²



Valeurs approximatives.

## Double Skin DP-RKT (blue) with screw-on riser 600/580 grey and reinforced cap (green)

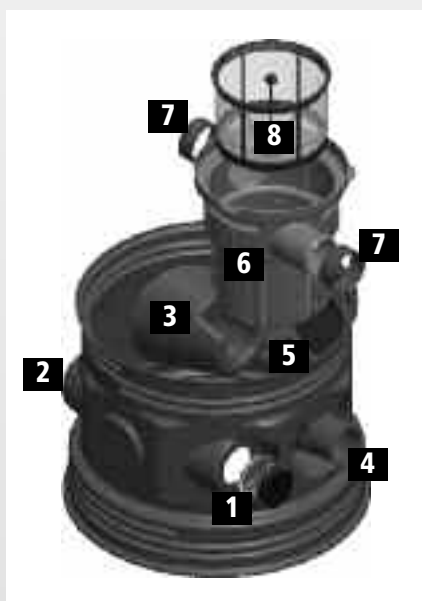
Above a roof area of 150m², install a High Flow VF1 cascade grill filter (see page 23) for each roof section of 350m² ou a VF2 filter.



Only the underground cisterns SP-SZ Basket and Sinus and SP-AT112, with a volume greater than 9000 litres, are equipped with a second man hole. For the SP-DP cisterns, check the details of the dimensions table.

# Underground SP and DP cisterns up to 10 m<sup>3</sup>

## Fitment of Basket filter in the riser REHC 600/580

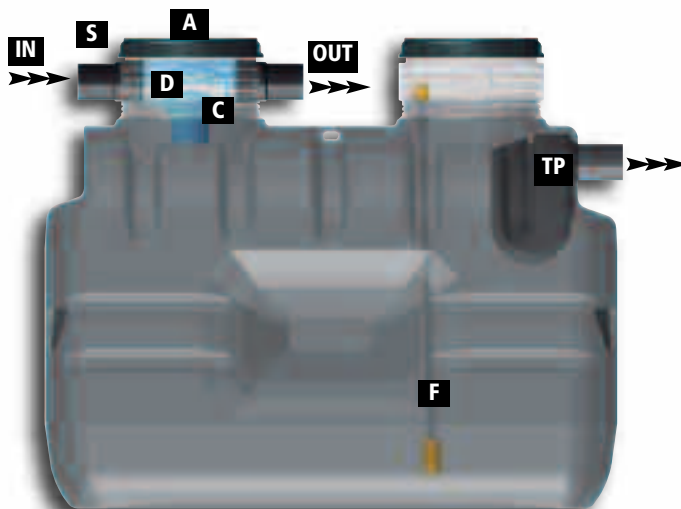


1. Joint and ventilation cover
2. Sleeve mounting point for service tube
3. Raw water inlet
4. Dirty water outlet
5. Filtered water outlet
6. Body of filter
7. Encased watertight joint
8. Filtering basket
9. Filtering sieve
10. Filter cap
11. Backwashing device.

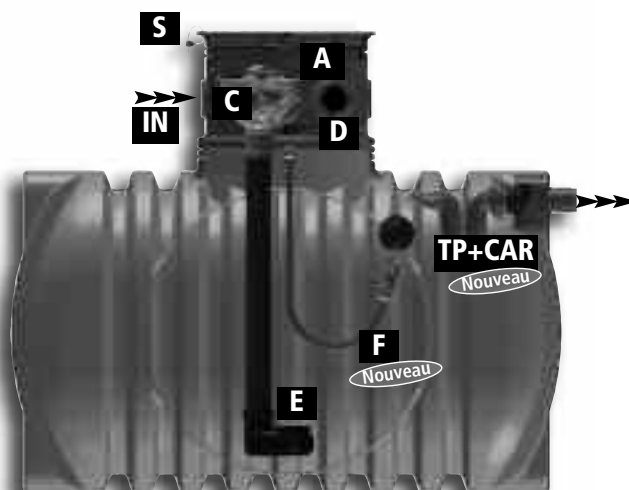


## Fitment of filter "Sinus" in the riser REHC 600/580

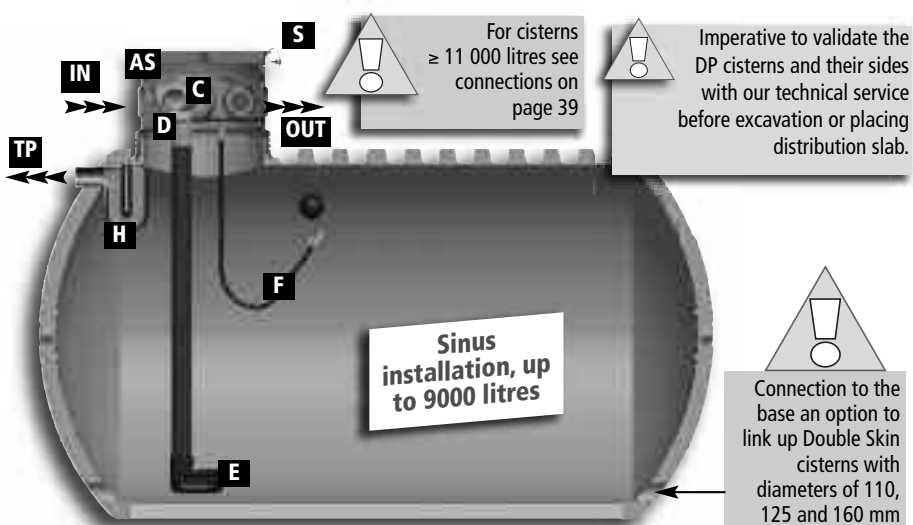
## SP-SZ 2500 and 3500 - SP-SZ 5000, 7500 and 10000 l. "Sinus"



## AT 112 2500, 5000, 7500 and 10 000 l. "Sinus"



## DP-RKT 3 500 to 9 000 l. "Sinus" linkable

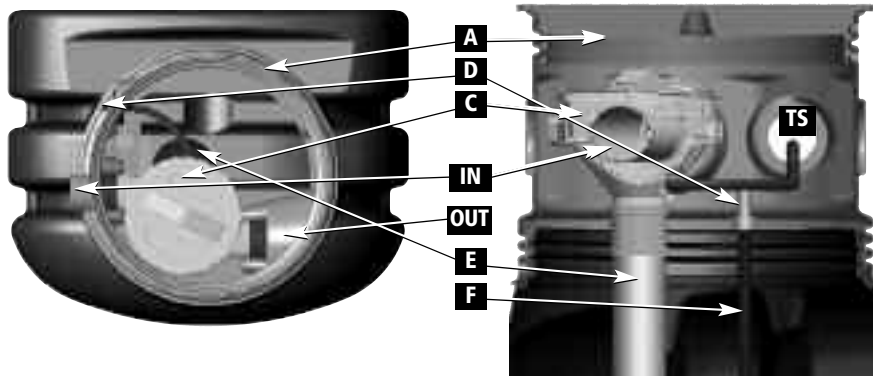


# Underground cisterns SP and DP up to 10m<sup>3</sup>

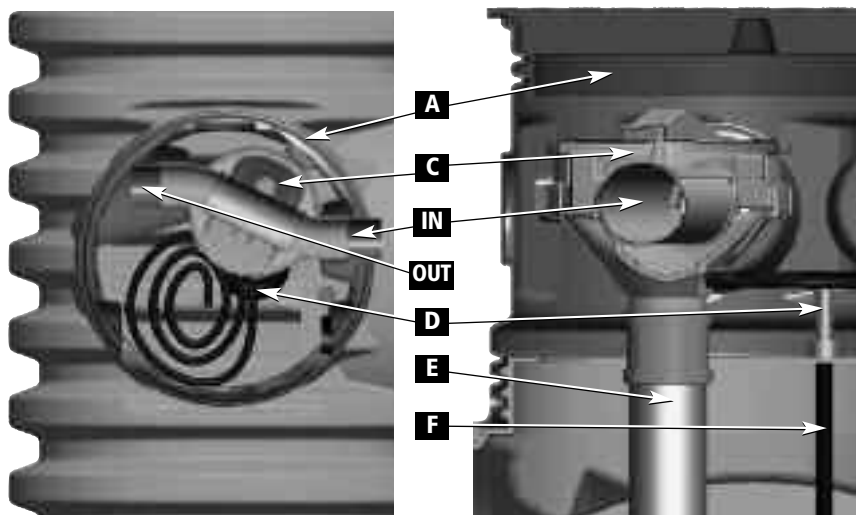
## SP-SZ 2500 and 3500 - SP-SZ 5000, 7500 and 10000 l. "Sinus"

Above

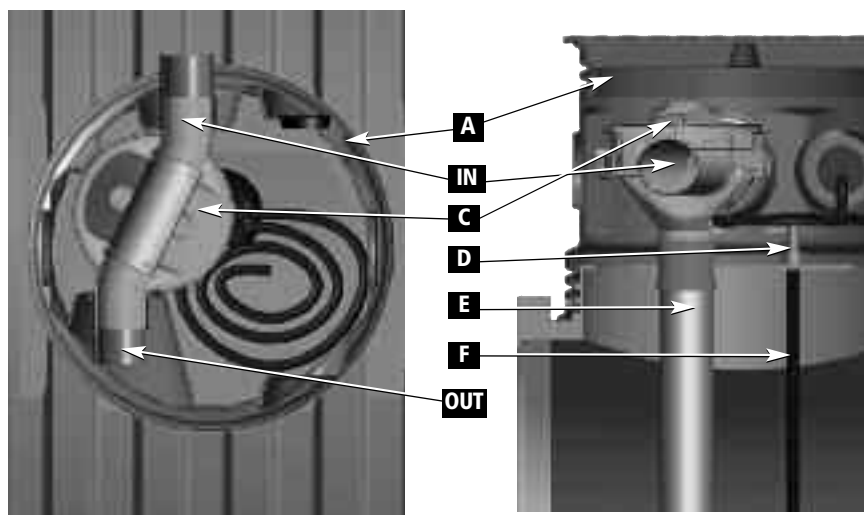
Cross-section



## AT 112 2500, 5000, 7500 and 10 000 l. "Sinus"



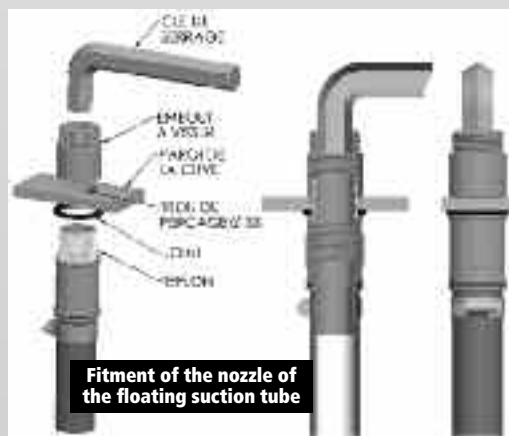
## DP-RKT 3 500 to 9 000 l. "Sinus" linkable



### Keys

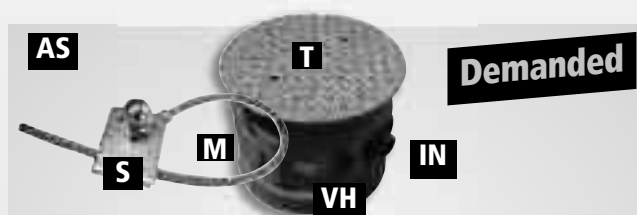
- A** Riser REHC 600/580 with reinforced cap for pedestrian zones,
- C** Integrated "Sinus" grill filter, filtering tubular, horizontal cartridge, integrated and removable, with « Vortex » effect, placed upstream of storage for:
  - filtration without energy, without coming into contact with the inside of the cistern,
  - recuperating close to 90 % of collected water
  - ensuring an auto clean without energy,
  - backwashing integrated in the filtering cartridge of the "Sinus" filter.

Use a High Flow VF1 cascade particle grill filter for a roof surface of between 150 and 350 m<sup>2</sup> and by section of 350 m<sup>2</sup> for all cisterns, VF1 TWIN per 700 m<sup>2</sup> section.
- D** Connection point for connection of surface lift pump,
- F** Flexible floating suction tube connectable to a lift pump, equipped with a stainless steel strainer with anti-siphon valve and a floator to avoid sucking bottom sludge and floating matter,
- E** Calm water inlet, submerged and effective, allowing the arrival of pre-filtered water whilst avoiding the re-suspension of sand (sediments) at the same time as oxygenating the contained water for a better preservation of water quality and cleanliness.
- H** Overflow siphon outlet equipped with an anti-rodent barrier in stainless steel
- IN** Entry of raw rainwater coming from downpipes
- OUT** Outflow of dirty water or water charged with matter (leaves, moss...) without coming into contact with the interior of the cistern,
- S** Child-safety device in stainless steel,
- TS** Service Tube pour pumping, supply, gauge, water level indicator, etc.





# Storage underground and regulation of flow AT 112 Sinus



**Demanded**

## New screw-on riser 600/580, grey AS :

- Adjustable with 1 supplementary screw-on riser REHC 600/150,
- with reinforced insulating cap **T**, for pedestrian zones,
- with integrated stainless steel child-safety device **S**,
- with raw water inlet **IN**,
- with passage **OUT** of dirty water without going through the cistern
- with sleeve mounting point **M** for service tube connection (electricity supply, pumping, backwashing, gauge),
- with slot to Upper Ventilation **VH**,
- with access to the inside for integral cleaning,
- with rapid and easy removal and replacement of the Sinus grill filter and the calm water inlet for integral cleaning access of the cistern.

Characteristic warning sign **MA** with the wording "ne convient pas pour l'eau potable" (water NOT for drinking), above all bolted decanting taps coming from the pump or from the control module EP, 2 auto adhesive warning signs delivered with each eligible underground cistern



**Demanded**

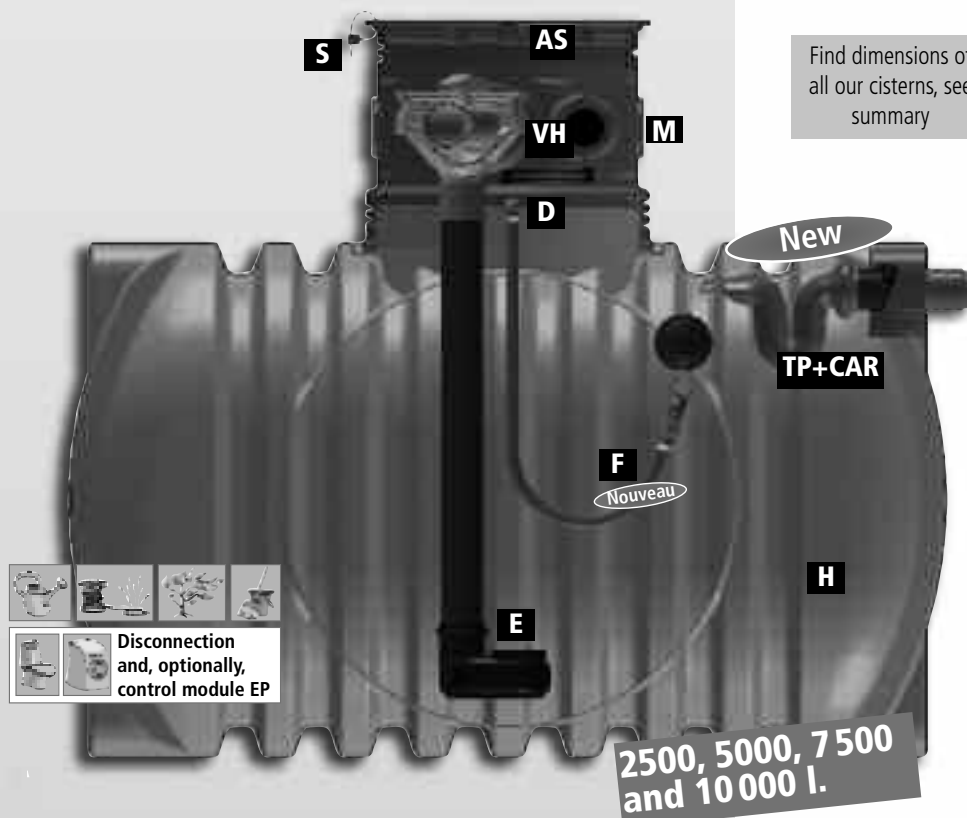


**Demanded**

**Integrated Sinus grill filter C**, tubular, horizontal filtering cartridge integrated and removable with Vortex effect placed upstream of storage, for:

- filtration without energy, without coming into contact with cisterns interior,
- recuperating close to 90 % of collected water
- ensuring an auto clean without energy,
- backwashing integrated **J** into the filtering cartridge

Plan to use one (1) High Flow VF1 cascade grill filter for a roof surface of between 150 and 450m<sup>2</sup> and per 450m<sup>2</sup> section for all cisterns



Find dimensions of all our cisterns, see summary



Disconnection and, optionally, control module EP

**2500, 5000, 7 500 and 10 000 l.**



**Demanded**

**Calm water inlet E** submerged and effective, allowing the arrival of pre-filtered water whilst avoiding re-suspension of sand (sediment) at the same time as oxygenating the contained water for improved water quality preservation and cleanliness. Rapid and easy removal for easy replacement.



**Food-grade**

Interior skin is white in PEHD natural, food-grade.

**Overflow siphon TP+CAR** Overflow siphon G, situated above the outlet water level for a 2nd filtration, without energy by the skimmer effect, by the removal of greasy particles (hydrocarbons, oils) fine particles (pollen), non-return valve, accessible and washable, doubling as anti-rodent grill on the outlet of the overflow skimmer siphon.

**Flow regulation Protection**



**TP+CAR**



**Safety**

**Equipment for connection Ø 1" D** of 1 surface pump (option sold separately). **Flexible floating suction tube F** joinable to a lift pump, equipped with a strainer in stainless steel with anti-siphon valve and a floater to avoid suction of bottom sludge and floating matter.

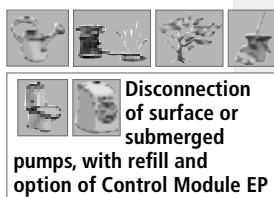


# Storage underground and regulation of flow

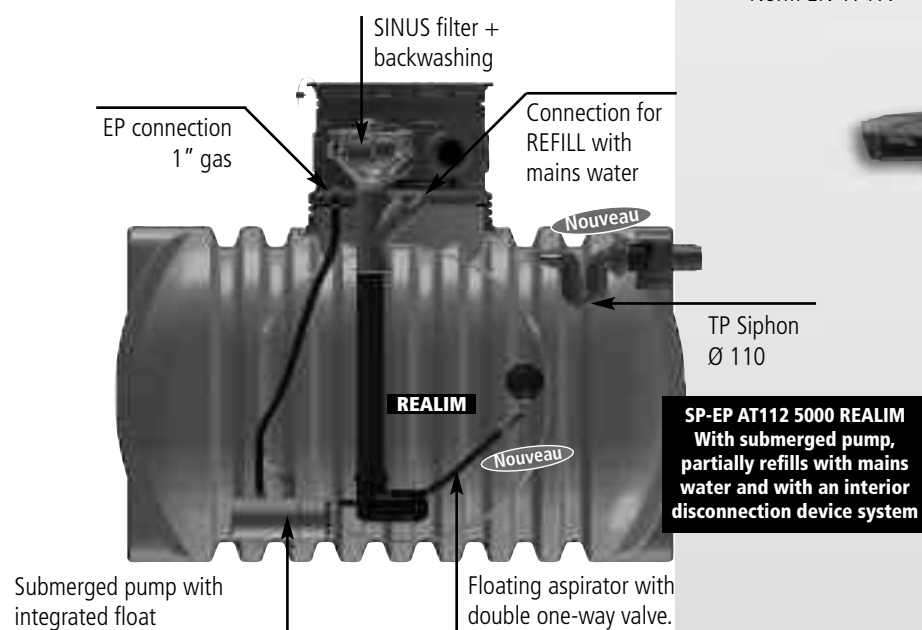
## AT112 "Sinus REALIM" underground cistern

If the head pressure needed in the distribution system > 8 metres

**Single Skin AT 112 cisterns, with SINUS filter and backwashing, of 2 500, 5 000, 7 500 and 1000 l.**



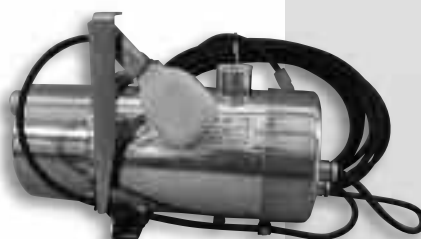
The submerged pump is equipped with a float that sends information about the presence of water, or lack thereof, via a cable linked to a command box. This box is installed in the house and controls a solenoid valve, allowing mains water to refill the cistern by gravity. The supplied disconnection device kit is equipped with a cone with an air space of 50mm, conforming to the Norm EN 1717.



Find dimensions of all our cisterns on summary

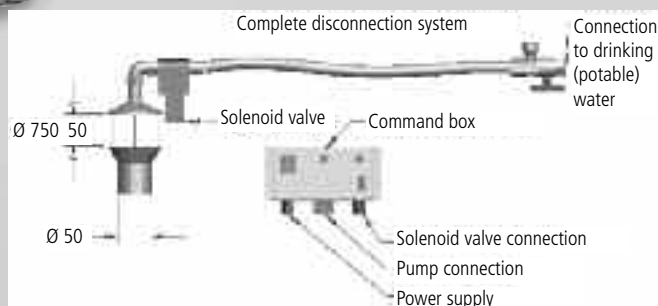
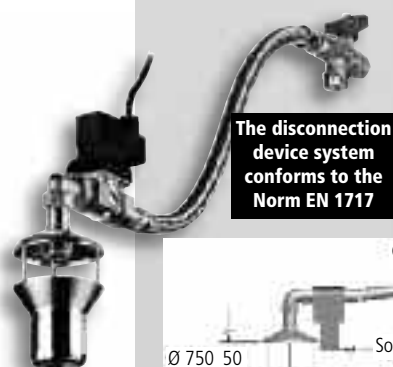
**Submerged pump complete with disconnection device for system AT112 REALIM**

Art. 34 000



The submerged pump is equipped with a float that sends information about the presence of water, or lack thereof, via a cable linked to a command box. This box is installed in the house and controls a solenoid valve, allowing mains water to refill, by gravity, the cistern. The supplied disconnection device kit is equipped with a cone with an air space of 50mm, conforming to the Norm EN 1717.

| ARTICLE | DESIGNATION                        | DIMENSIONS       |
|---------|------------------------------------|------------------|
| 34 003  | EP 2500 AT 112 REALIM - POMPE      | Idem AT112       |
| 34 004  | EP 5000 AT 112 REALIM - POMPE      | Idem AT112       |
| 34 005  | EP 7500 AT 112 REALIM - POMPE      | Idem AT112       |
| 34 127  | EP 10000 AT 112 REALIM - POMPE 2TH | Idem AT112       |
| 34 007  | EP 2500 AT 112 REALIM + POMPE      | Idem AT112       |
| 34 008  | EP 5000 AT 112 REALIM + POMPE      | Idem AT112       |
| 34 009  | EP 7500 AT 112 REALIM + POMPE      | Idem AT112       |
| 34 128  | EP 10000 AT 112 REALIM + POMPE 2TH | Idem AT112       |
| 34 011  | EP 2500 SP SLZ REALIM - POMPE      | Idem SP-SZ SINUS |
| 34 012  | EP 3500 SP SLZ REALIM - POMPE      | Idem SP-SZ SINUS |
| 34 013  | EP 5000 SP SLZ REALIM - POMPE      | Idem SP-SZ SINUS |
| 34 014  | EP 7500 SP SLZ REALIM - POMPE      | Idem SP-SZ SINUS |
| 34 135  | EP 10000 SP SLZ REALIM - POMPE 2TH | Idem SP-SZ SINUS |
| 34 016  | EP 2500 SP SLZ REALIM + POMPE      | Idem SP-SZ SINUS |
| 34 017  | EP 3500 SP SLZ REALIM + POMPE      | Idem SP-SZ SINUS |
| 34 018  | EP 5000 SP SLZ REALIM + POMPE      | Idem SP-SZ SINUS |
| 34 019  | EP 7500 SP SLZ REALIM + POMPE      | Idem SP-SZ SINUS |
| 34 133  | EP 10000 SP SLZ REALIM + POMPE 2TH | Idem SP-SZ SINUS |



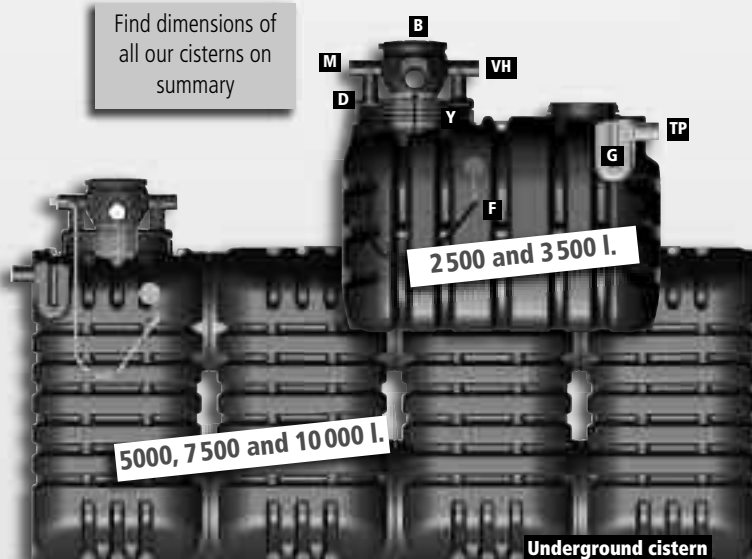
Serial number – date of fabrication

19

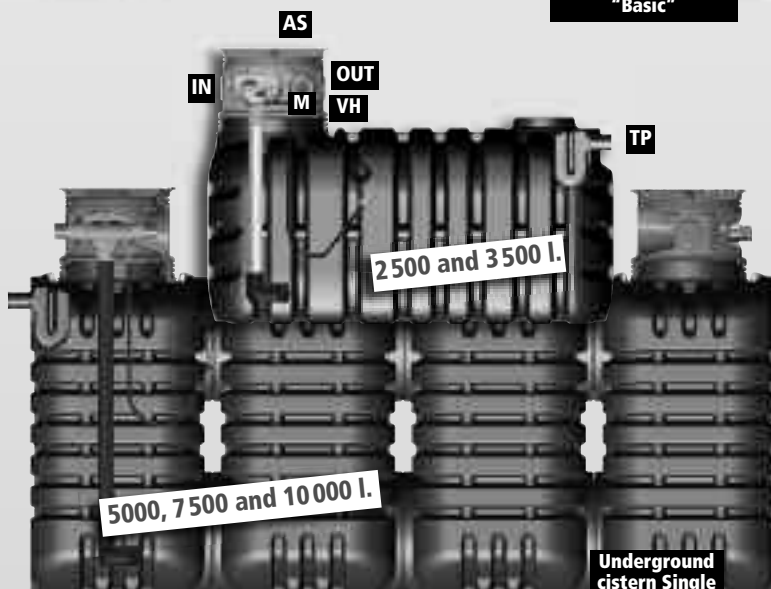


# Description of underground storage Single Skin SP and AT 112

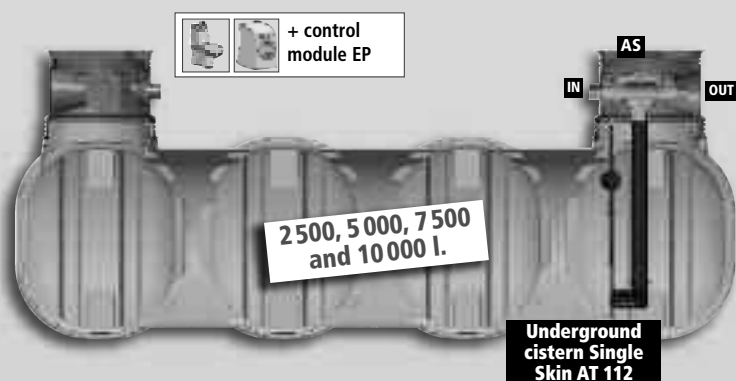
Find dimensions of  
all our cisterns on  
summary



Underground cistern  
Single Skin SP-SZ  
"Basic"



Underground  
cistern Single  
Skin SP-SZ



Underground  
cistern Single  
Skin AT 112

## AquaLentz SP-SZ underground cisterns Single Skin, produced by extrusion blowmoulding High Density Polyethylene (PEHD)

- ✓ horizontal monobloc cisterns of 2500 and 3500 l.
- ✓ vertical units of 2500 l, assembled by PEHD welding
- ✓ unalterable (suppression of internal and external corrosion)
- ✓ very resistant to knocks and to variations in filling (Conforming to decrees 21.08.2008 and 03.10.2008);
- ✓ unresponsive to temperature differences;
- ✓ light: easy to handle and put into place with lifting rings.

## SP cisterns equipped with:

### Side **IN** SP-SZ horizontal and vertical

- ✓ a (1) manhole Ø 600mm equipped with a (1) screw-on riser REHC 600/580 black Basket **AP** or grey SINUS **AS** Allowing access to the cisterns interior for an integral clean (Conforming to decrees 21.08.2008 and 03.10.2008)

### With, on the **TP** side:

- ✓ a (1) manhole Ø 400 mm equipped with a (1) screw-on riser REHC 400/300 (sold separately)
- One (1) screw-on riser REHC 600/580 grey **AP** or black **AS**, equipped with either:
  - ✓ one (1) inlet **IN** for raw rainwater coming from the downpipe,
  - ✓ one (1) integrated grill filter Sinus **C** in the grey riser **AS** removable for access to the cisterns interior and auto-cleaning, for up to 150m<sup>2</sup> of roof, with horizontal cartridge in stainless steel, filtering and cleanable with backwashing, trapping particles (leaves, moss) and matter contained in rainwater  
Plan to install a (1) High Flow VF1 cascade grill filter for a roof surface of between 150 and 450m<sup>2</sup> and per 450m<sup>2</sup> sections for all SP cisterns (Conforming to decrees 21.08.2008 and 03.10.2008).
  - ✓ one (1) Basket filter **P** integrated in the removable black riser **AP** to access the cisterns interior, up to 150m<sup>2</sup> of roof (Conforming to decrees 21.08.2008 and 03.10.2008).
- one (1) removable calm water inlet tube **E**, plunging to the units base avoiding the re-suspension of possible sediment whilst promoting oxygenation of water stored in the cisterns for a better preservation of quality and cleanliness (Conforming to decrees 21.08.2008 and 03.10.2008).
  - ✓ one (1) evacuation outlet **OUT** for dirty water or water charged with matter (leaves, moss, etc.) without coming into contact with the cisterns interior (Conforming to decrees 21.08.2008 and 03.10.2008),
  - ✓ one (1) joint **D** for connection with a surface pump (option sold separately),
  - ✓ one (1) sleeve mounting point **M** for service tube connection,
  - ✓ one (1) slot to Upper Ventilation **VH** (Conforming to decrees 21.08.2008 and 03.10.2008).
  - ✓ one (1) reinforced screw-on insulating cap **T**, for pedestrian zones (Conforming to decrees 21.08.2008 and 03.10.2008),
  - ✓ one (1) child-safety device **S** (Conforming to decrees 21.08.2008 and 03.10.2008), in stainless steel
- One (1) flexible floating suction tube **F** joinable to a lift pump, equipped with a stainless steel filtering strainer with anti-siphon valve and a float to avoid the suck up of bottom sludge and floating matter;
- One (1) overflow siphon **G** to remove overflow water and to suck up floating particles (oils, hydrocarbons, pollen), situated above the outlet water level with a removable anti-rodent barrier in stainless steel, preventing their entrance and finding themselves in a mortal trap, risk the degradation of stored water quality
- One (1) characteristic warning sign **MA** with the wording eau non potable (water NOT for drinking), above the bolted decanting tap coming from the pump or from the control module EP, auto adhesive warning sign delivered with each underground cistern (Conforming to decrees 21.08.2008 and 03.10.2008).
- One (1) non-return valve **CAR** Ø 110mm sited on the overflow siphon outlet, sold separately (Conforming to decrees 21.08.2008 and 03.10.2008).
- **TP+CAR** non-return valve, accessible and washable, doubling as anti-rodent grill on the outlet of the overflow skimmer siphon.

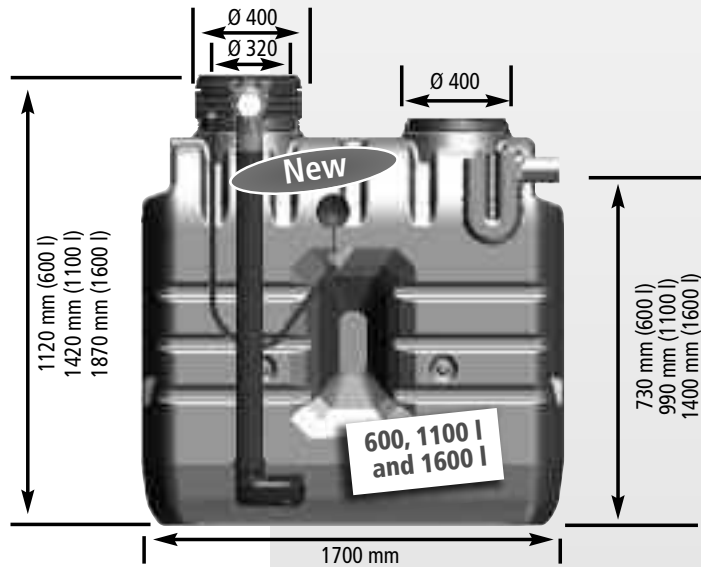


Only the underground cistern SP-SZ basket or Sinus and SP-AT112, of a capacity over 9000 litres are equipped with a second manhole.

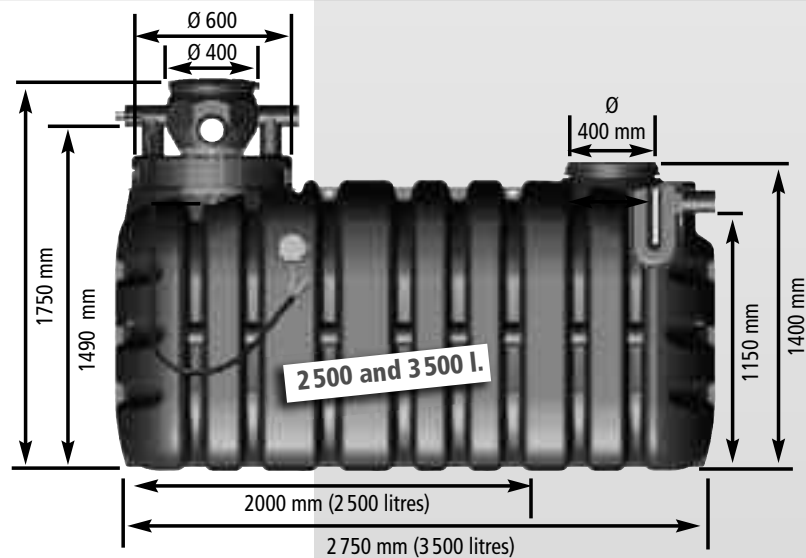
# Dimensions of underground SP Basic cisterns

## Rainwater use uniquely on the exterior of buildings

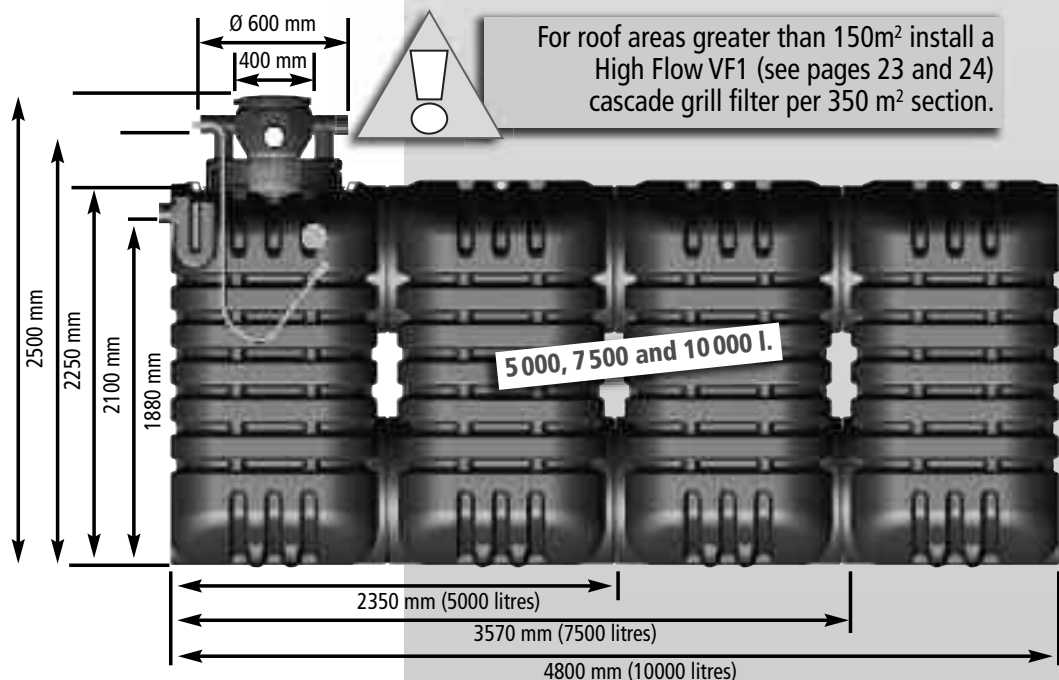
**Single Skin SP-SZ BASIC  
600 and 1100 litres**



**Single Skin SP-SZ BASIC  
2500 and 3500 litres**



**Single Skin SP-SZ BASIC  
5000, 7500  
and 10000 litres**



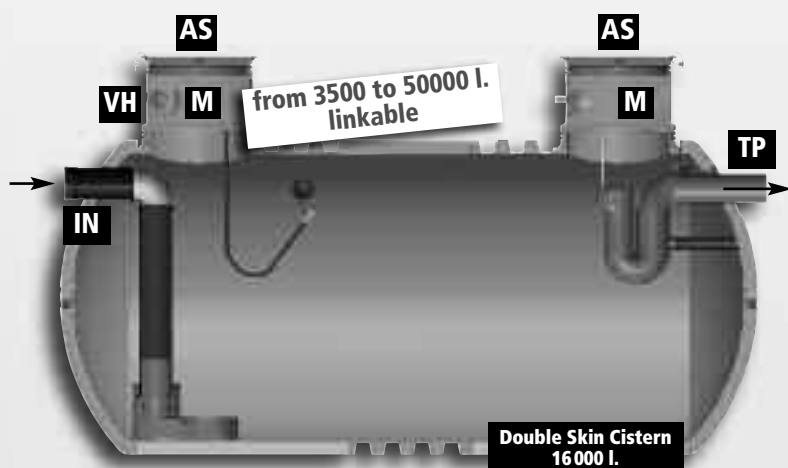
**Lifting ring**

Approximate values

Serial number – date of fabrication

# Underground storage and flow regulation

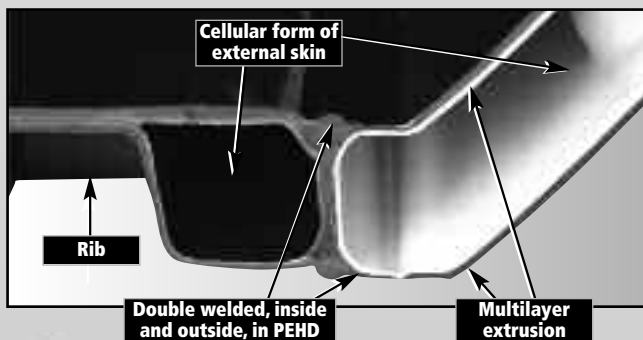
## Double Skin DP



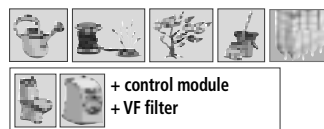
### 19 linkable Double Skin cisterns from 3500 to 50 000 l for a storage volume to measure.

All DP cisterns are linkable after validation of a supplied plan, showing connections of lower portions at 110, 125 and 160 mm (option billed separately) for unlimited water store volume (see doc EP68, example Jardin Botanique in Bordeaux, 11 x 25 000 litres, of which 275 000 litres is usable).

- **Produced as a single piece** composed of double skin segments (6 layers of PEHD) assembled by double PEHD welding inside and outside;
- **Cisterns are linkable** by the base to equilibrate the level of stored water and by the top with the overflow allowing water to flood to linked cisterns in order to increase total storage volume;
- **Unalterable** suppression of all internal and external corrosion risk; very resistant to knocks and monobloc;
- **Insensitive to temperature changes;**
- **Light**, simple to transport and to install almost anywhere, using the same mechanical digger as is used for the excavation;
- **Reduction of installation costs** incomparable: no handling cranes;
- **Rigid and resistant to large pressures**, to earth pressures or perched groundwater as well as to large quantities of backfill due to the cellular form of the external double skin;
- **Unique shape using ground pressure** for stabilization and additional resistance thus requiring no water filling during placement;
- **Resistance to depression**, shown by empty and in situ testing, due to the molecular structure of PEHD which eliminates any porosity increasing even more this resistance and stability;
- **Placement of empty cistern:** no water filling required during backfilling;
- **20 years of expertise** in the technique extrusion blowmoulding PEHD THPM, new double skin system producing solidity without parallel and guaranteed watertightness.
- **Integrated stabilization feet**, welded at the base of the cellular structures and keeping the unit level;



Imperative to validate the DP cisterns and their sides with our technical service before excavation or placing distribution slab



Find the dimensions of all our cisterns on summary

#### Equipment of DP cisterns:

- One (1) grilled cistern inlet, with rainwater coming from grill filters High Flow VF1, VF1 TWIN or VF2 for cisterns with a volume above 9000 litres (Conforming to decrees 21.08.2008 and 03.10.2008).
  - ✓ Either a riser REHC 600/580 for cisterns  $\geq$  to 11 000 litres,
  - ✓ Either one (1) screw-on grey SINUS riser **AS** REHC 600/580
  - ✓ one (1) inlet **IN** of raw rainwater coming from downpipes, up to 9000 litres, into the grey riser REHC 600/580 **AS**.
- ✓ Either one (1) Sinus filter **C**, removable to allow access to cisterns interior, with filtering cartridge in stainless steel, auto-cleaning and cleanable by the integrated backwashing, trapping particles and matter (leaves, moss) contained in the raw rainwater
- **Integrated Sinus grill filter **C** in all cisterns up to 9000 litres and for a roof surface less than 150m<sup>2</sup>.**
- ✓ Plan to use one (1) high flow, cascade grill filter:
  - VF1 for a roof surface between 150 and 350m<sup>2</sup> and by 350m<sup>2</sup> sections for all cisterns
  - VF1 TWIN per 700m<sup>2</sup> section for all cisterns
  - VF2 per 750m<sup>2</sup> section for all DP cisterns.
- ✓ of one (1) evacuation outlet **OUT** for dirty water or matter laden water (leaves, moss, etc.) without coming into contact with the cisterns interior), up to 9000 litres or for the filter VF1, VF1 TWIN, VF2 or VF6 (Conforming to decrees 21.08.2008 and 03.10.2008),
- ✓ of one (1) joint for connection of a lift pump to the surface (option sold separately),
- ✓ of one (1) reinforced and insulating screw-on cap **I** for pedestrian zones (Conforming to decrees 21.08.2008 and 03.10.2008),
- ✓ of one (1) child-safety device **S** in stainless steel (Conforming to decrees 21.08.2008 and 03.10.2008).
- ✓ of one (1) inlet **IM** for filtered water, filtered by VF1 or VF2 for cisterns  $\geq$  to 11 000 litres,
- ✓ of one (1) slot for Upper Ventilation **VH** (Conforming to decrees 21.08.2008 and 03.10.2008),
- ✓ of one (1) sleeve mounting point **M** for service tube connection;
- One (1) calm water inlet tube **E**, removable, plunging to the base of the device to avoid re-suspension of possible sediment whilst encouraging the diffusion of oxygen in the cisterns stocked water, for improved water quality preservation and cleanliness (Conforming to decrees 21.08.2008 and 03.10.2008),
- One (1) flexible floating suction tube **F** joinable to a lift pump, equipped with a stainless steel filtering strainer with anti-siphon valve and a floater to avoid the suck up of bottom sludge and floating matter;
- One (1) overflow siphon **G** to remove overflow water and to suck up floating particles (oils, hydrocarbons, pollen), equipped with a removable anti-rodent barrier in stainless steel,
- One (1) characteristic warning sign **MA** with the wording eau non potable (water NOT for drinking), above the bolted decanting tap coming from the pump or from the control module EP, auto adhesive warning sign delivered with each underground cistern (Conforming to decrees 21.08.2008 and 03.10.2008).
- One (1) non-return valve **CAR** Ø 110mm sited on the overflow siphon outlet, sold separately (Conforming to decrees 21.08.2008 and 03.10.2008).



# High Flow cascade grill filters for underground storage, up to 10 m<sup>3</sup> (sold separately)

- **High Flow cascade grill filter VF1:**
- For DP cisterns of more than 10000l
- For roof surface between 150 and 350 m<sup>2</sup>
- For section surface of 350m<sup>2</sup>

Art. 30534

## Description

- High Flow cascade grill filter VF1 for underground installation;
- Two levels of cleaning: firstly, filtering of large impurities, then fine filtration of rainwater;
- Discharged impurities expelled via the overflow;
- Recuperation of more than 85 % of rainwater;
- DN100 int.;
- Ø ext 390 mm - H 451 mm;
- Integrated, encased, telescopically extending riser, height between 500 and 600 mm.
- Mesh size 0.55 mm.

## Installation

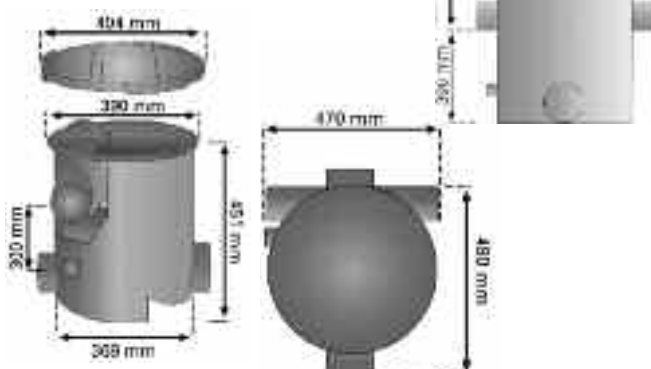
- Place on horizontal sand bed.
- Cut the cover(s) chosen for the inlet IN, according to roof surface area, 1 cover plate < 2225 m<sup>2</sup> > 2 cover plates.
- Join rainwater to IN from the right or left, up to 225 m<sup>2</sup>, above that and up to 350 m<sup>2</sup>, join to IN from the right and left.

## Maintenance

- Monitor the filter by removing the cover plate twice a year
- Dirty Filters can be pulled out and washed with a water jet.
- Reinsert the filter after washing with water



1. Double inlet for raw water Ø 110 mm
2. Single cascade
3. Filtration sieve
4. Exit of filtrated water towards the cistern
5. Exit of dirty water towards the waste water network



- **High Flow cascade grill filter VF1 TWIN:**
- For DP cisterns of more than 10000l
- For roof sections with areas of 700 m<sup>2</sup>.

Art. 32603

## Description

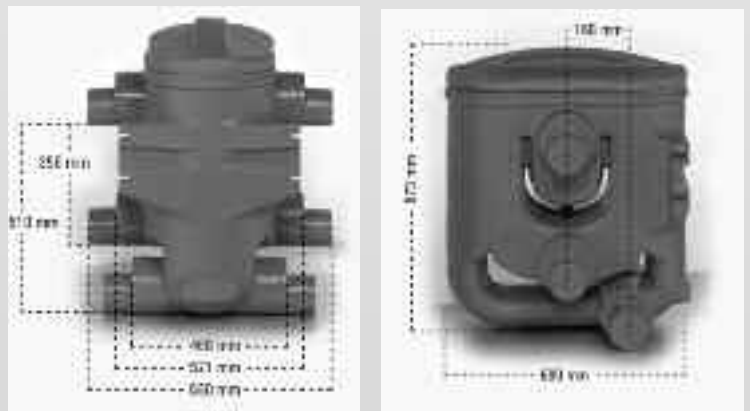
- High Flow cascade grill filter VF1 TWIN; install by fixing to interior wall of building
- Two levels of cleaning: first, filtering of large impurities, then fine filtration of rainwater;
- Discharged impurities, removed by overflow;
- Recuperation of more than 85 % of the rainwater;
- 2 Inlets and 2 x 2 outlets Ø 110 or 160 mm;
- Mesh size 0.65 mm;
- Height difference between inlet and outlet to the cistern: 350 mm
- Height difference between inlet and outlet to the evacuation: 510 mm

## Installation

- Screw horizontally onto an interior wall.
- Cut chosen cover plate(s) of the inlet IN, according to the surface area 1 cover Ø 160 < 350 m<sup>2</sup> > 2 covers Ø 160.
- Join rainwater to IN from the left or the right, up to 350m<sup>2</sup>, above that and up to 700 m<sup>2</sup>, join to IN from the left and the right.

## Maintenance

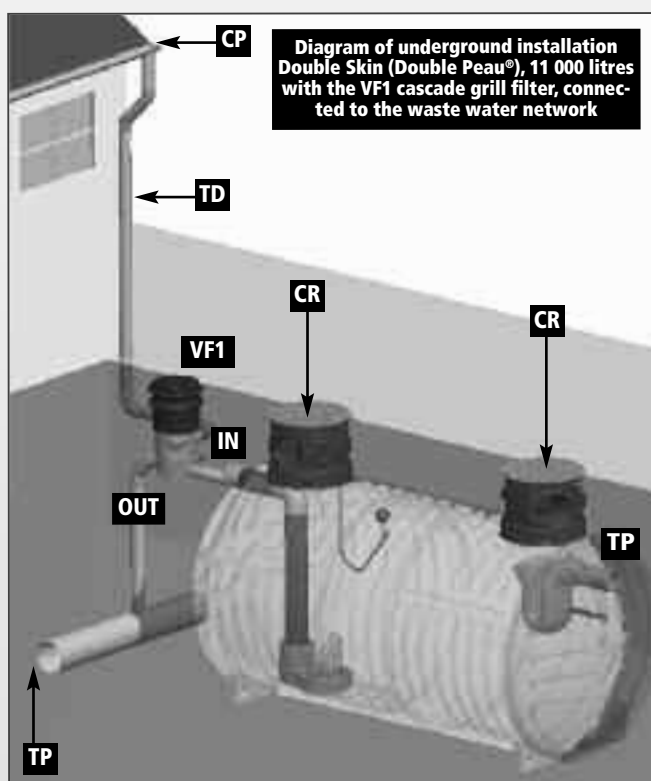
- Monitor the 2 filters by lifting the cover twice a year
- Dirty filters can be pulled out and cleaned with a water jet
- Reinsert the filter after washing with water



1. Double inlet of raw water Ø 110 and 160 mm,
2. Double cascade,
3. Double filtration sieve,
4. Double outlet of filtered water to the cistern,
5. Double evacuation of dirty water to the waste water network.

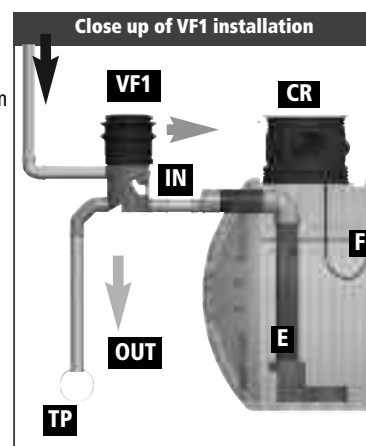


# High Flow cascade grill filters (sold separately)



## Key

- CAR** non-return valve Ø 110 mm to place on the siphon overflow outlet (sold separately).
- CP** debris trap on downpipe (options sold separately)
- CR** Screw-on riser REHC 600 CR adjustable to 1 height with reinforced insulated green cap,
- F** Flexible floating suction tube with strainer,
- IN** Inlet of filtered water into cistern,
- OUT** Evacuation of dirty water,
- S** Child-safety device in stainless steel.
- TD** Downpipe from gutter,
- TP** Overflow towards infiltration or collector,
- VF1** Cascade grill filter High Flow VF1, VF1 TWIN or VF2 according to collection surface area.
- E** Calm water inlet tube removable, plunging to base of unit.



Overflow can be placed directly into the soil (see page 38), and thus joined into the water table

Imperative to validate the DP cisterns and their sides with our technical service before excavation or placing distribution slab

# Wall conduits and connections (sold separately)

- When installing the non-incorporated filtering collector (not supplied, types VF1, VF1 TWIN or VF2 (see pages 23, 24 and doc EP68 ), Rainus... in the initial equipment, upstream of the DP cistern  $\geq 11000$  l, it must be connected to the inlet conduit Ø 100 mm situated on the upper half of the cistern, inlet side
- Fit the suction pipe work (minimum 1") to the strainer, via the 1" exterior sleeve of the connection assembly, situated in the riser.
- Pass any service cables for water removal or water level indication through the box for this purpose in the riser opening
- Place a PVC service tube Ø 110 mm between the building and the unit in order to install sensitive cables and pipe work for sampling.
- **Watertight wall conduit** for the PVC service tube Ø 110 mm **PME** (option sold separately) includes 4 elements: 1 x tube Ø 50 mm, 1 x tube Ø 32 mm, 2 x electric cables, in order to avoid cistern flooding. Art. 32 619..



Strongly advised, to avoid under-ground flooding in case of clogging of overflow siphon



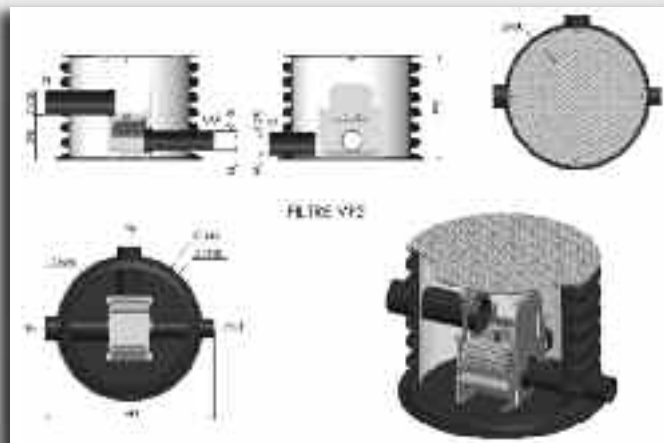
# High Flow cascade grill filters for above 10 m<sup>3</sup> underground storage (sold separately)

- **VF2 High Flow cascade grill filter:**
- for DP cisterns larger than 10 000 l.
- for surface area sections of 850 m<sup>2</sup>

Art. 32 092

## Description

- Installed underground, upstream of the cistern;
- Integrated in prefabricated inspection cover PE, Ø 1200 mm
- Two types of filtration: first, filtering of large impurities, then fine filtration of rainwater;
- Discharged impurities are then removed by overflow;
- Recuperation of more than 85 % of the rainwater collected and filtered;
- Little maintenance: two (2) annual controls and one (1) annual rinse;
- Inlet IN: Ø 200 mm;
- Outlet OUT: Ø 160 mm;
- Overflow TP: Ø 200 mm;
- Maximum flow: 3 l/sec.;
- Fine sieve mesh fin, 0.55 mm;



- **VF6 High Flow cascade grill filter:**
- for DP cisterns with capacity over 10 000 l.
- for roof sections over 2350 m<sup>2</sup>.

Art. 32 093

## Description

- Installed underground, upstream of the cistern;
- Integrated in prefabricated inspection cover PE, Ø 1200 mm
- Two types of filtration: first, filtering of large impurities, then fine filtration of rainwater;
- Discharged impurities are then removed by overflow;
- Recuperation of more than 85 % of the rainwater collected and filtered;
- Little maintenance: two (2) annual controls and one (1) annual rinse;
- 2 inlets IN: Ø 250 mm;
- 1 sortie OUT: Ø 200 mm;
- Overflow TP: Ø 250 mm;
- Maximum flow: 9 l/sec. /32.4 m<sup>3</sup>/hour;
- Fine sieve mesh fin, 0.55 mm;

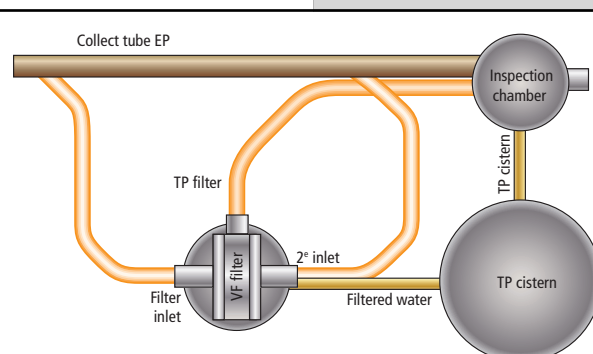


VF6 integrated in PE inspection chamber with option of hydraulic and lockable cap.

## Installation of VF6 filter at ENSAT, Toulouse



Placement of the VF6 filter integrated in PE inspection chamber



# Dimensions of underground SP, AT and DP cisterns



## Single Skin cistern SP Sinus or basket and SP BASIC and AT112 Sinus for underground storage

All the underground cisterns need a downpipe filter installed. The integrated Sinus grill filter is adapted to a roof surface area of 150m<sup>2</sup>. Above a roof area of 150m<sup>2</sup> install the High Flow VF1 cascade grill filter per 350m<sup>2</sup> section for all cisterns (SP and AT 112) (sold separately see pages 23 and 24)

| Article                   | Capacity (litres) | Weight (kg) | Diameter opening (cm) | Length A (cm) | Width (cm) | Height Inlet (E) Hen (cm) | Height Siphon (TP) Hs (cm) Ø 110mm | Height Ht (cm) Without riser | Height HR (cm) with riser (Ø en cm) | Ø inlet/outlet (mm) | Number of manholes Ø 60cm | Riser with Sinus filter integrated into new grey riser | Riser with basket filter integrated into new black riser | With "Basic" riser |
|---------------------------|-------------------|-------------|-----------------------|---------------|------------|---------------------------|------------------------------------|------------------------------|-------------------------------------|---------------------|---------------------------|--|--|--------------------|
| EP 2500SP SLZ SINUS 1TH   | 31937             | 2500        | 92                    | 60            | 200        | 119                       | 154                                | 115                          | 140                                 | Ø 60/185            | 110                       | 1 x Ø 60 / 1 x Ø 40                                    | YES  | NO                 |
| EP 2500SP SLZ PANIER 1TH  | 32441             | 2500        | 92                    | 60            | 200        | 119                       | 154                                | 115                          | 140                                 | Ø 60/185            | 110                       | 1 x Ø 60 / 1 x Ø 40                                    | NO   | YES                |
| EP 3500SP SLZ SINUS 1TH   | 31939             | 3500        | 120                   | 60            | 275        | 119                       | 154                                | 115                          | 140                                 | Ø 60/185            | 110                       | 1 x Ø 60 / 1 x Ø 40                                    | YES  | NO                 |
| EP 3500SP SLZ PANIER 1TH  | 32442             | 3500        | 120                   | 60            | 275        | 119                       | 154                                | 115                          | 140                                 | Ø 60/185            | 110                       | 1 x Ø 60 / 1 x Ø 40                                    | NO   | YES                |
| EP 2500SP SLZ BASIC 1TH   | 31938             | 2500        | 82                    | 40            | 200        | 119                       | 149                                | 115                          | 140                                 | Ø 40/175            | 110                       | 1 x Ø 60 / 1 x Ø 40                                    | NO   | NO                 |
| EP 3500SP SLZ BASIC 1TH   | 31940             | 3500        | 110                   | 40            | 275        | 119                       | 149                                | 115                          | 140                                 | Ø 40/175            | 110                       | 1 x Ø 60 / 1 x Ø 40                                    | NO   | NO                 |
| EP 5000SP SLZ SINUS 1TH   | 30392             | 5000        | 180                   | 60            | 235        | 135,5                     | 233                                | 188                          | 210                                 | Ø 60/265            | 110                       | 1  | YES  | NO                 |
| EP 5000SP SLZ PANIER 1TH  | 32443             | 5000        | 180                   | 60            | 235        | 135,5                     | 233                                | 188                          | 210                                 | Ø 60/265            | 110                       | 1  | NO   | YES                |
| EP 7500SP SLZ SINUS 1TH   | 30393             | 7500        | 260                   | 60            | 357        | 135,5                     | 233                                | 188                          | 210                                 | Ø 60/265            | 110                       | 1  | YES  | NO                 |
| EP 7500SP SLZ PANIER 1TH  | 32444             | 7500        | 260                   | 60            | 357        | 135,5                     | 233                                | 188                          | 210                                 | Ø 60/265            | 110                       | 1  | NO   | YES                |
| EP 10000SP SLZ SINUS 2TH  | 34130             | 10000       | 350                   | 60            | 480        | 135,5                     | 233                                | 188                          | 210                                 | Ø 60/265            | 110                       | 1  | YES  | NO                 |
| EP 10000SP SLZ PANIER 2TH | 34131             | 10000       | 350                   | 60            | 480        | 135,5                     | 233                                | 188                          | 210                                 | Ø 60/265            | 110                       | 1  | NO   | YES                |
| EP 5000SP SLZ BASIC 1TH   | 32101             | 5000        | 170                   | 40            | 235        | 135,5                     | 225                                | 188                          | 210                                 | Ø 40/250            | 110                       | Ø 40   | NO   | NO                 |
| EP 7500SP SLZ BASIC 1TH   | 32102             | 7500        | 250                   | 40            | 357        | 135,5                     | 225                                | 188                          | 210                                 | Ø 40/250            | 110                       | Ø 40   | NO   | NO                 |
| EP 10000SP SLZ BASIC 1TH  | 32103             | 10000       | 340                   | 40            | 480        | 135,5                     | 225                                | 188                          | 210                                 | Ø 40/250            | 110                       | Ø 40   | NO   | NO                 |
| EP 2500AT 112 SINUS 1TH   | 31600             | 2500        | 105                   | 60            | 112,5      | 230                       | 159                                | 118                          | 145                                 | Ø 60/190            | 110                       | 1  | YES  | NO                 |
| EP 7500AT 112 SINUS 1TH   | 31601             | 5000        | 205                   | 60            | 235,5      | 230                       | 159                                | 118                          | 145                                 | Ø 60/190            | 110                       | 1  | YES  | NO                 |
| EP 7500AT 112 SINUS 1TH   | 31602             | 7500        | 305                   | 60            | 358,5      | 230                       | 159                                | 118                          | 145                                 | Ø 60/190            | 110                       | 1  | YES  | NO                 |
| EP 10000AT 112 SINUS 2TH  | 34126             | 10000       | 405                   | 60            | 481,5      | 230                       | 159                                | 118                          | 145                                 | Ø 60/190            | 110                       | 1  | YES  | NO                 |

Nouvelle  
rehausse

Nouvelle  
rehausse



## Double Skin DP cisterns for underground storage

All the underground cisterns need a downpipe filter installed. The integrated Sinus grill filter is adapted to a roof surface area of 150 m<sup>2</sup>. Above a roof area of 150m<sup>2</sup> install the High Flow VF1 cascade grill filter per 350m<sup>2</sup> section for all DP cisterns and a High Flow VF2 cascade grill filter per 850 m<sup>2</sup> section (sold separately).

All these cisterns are linkable by slotting connections by the base (option charged separately) for an unlimited water storage capacity.

| Article                  | Capacity (litres) | Weight (kg) | Diameter opening (cm) | Length A (cm) | Width (cm) | Height Inlet (E) Hen (cm) | Height Siphon (TP) Hs (cm) Ø 110mm | Height Ht (cm) Without riser | Height HR (cm) with riser (Ø en cm) | Ø inlet/outlet (mm) | Number of manholes Ø 60cm | Number of feet | Riser with Sinus filter integrated into new grey riser | Riser with basket filter integrated into new black riser   |
|--------------------------|-------------------|-------------|-----------------------|---------------|------------|---------------------------|------------------------------------|------------------------------|-------------------------------------|---------------------|---------------------------|----------------|--|--|
| EP 3500DP RKT SINUS 1TH  | 30756             | 3500        | 285                   | 60            | 182        | 204                       | 223                                | 179                          | 210                                 | 260                 | 110                       | 4              | YES  | NO   |
| EP 5000DP RKT SINUS 1TH  | 30011             | 5000        | 365                   | 60            | 235        | 204                       | 223                                | 179                          | 210                                 | 260                 | 110                       | 4              | YES  | NO   |
| EP 6000DP RKT SINUS 1TH  | 30772             | 6000        | 400                   | 60            | 264        | 204                       | 223                                | 179                          | 210                                 | 260                 | 110                       | 4              | YES  | NO   |
| EP 7000DP RKT SINUS 1TH  | 30012             | 7500        | 480                   | 60            | 317        | 204                       | 223                                | 179                          | 210                                 | 260                 | 110                       | 4              | YES  | NO   |
| EP 9000DP RKT SINUS 1TH  | 30013             | 9000        | 560                   | 60            | 371        | 204                       | 223                                | 179                          | 210                                 | 260                 | 110                       | 4              | YES  | NO   |
| EP 11000DP RKT SINUS 2TH | 30774             | 11000       | 670                   | 60            | 452        | 204                       | 173                                | 160                          | 210                                 | 260                 | 200                       | 2              | 4  | High Flow VF1 to VF6 cascade grill filters sold and installed separately and doc EP 68). cisterns equipped with riser REHC 600/580 |
| EP 12000DP RKT SINUS 2TH | 30047             | 12500       | 755                   | 60            | 508        | 204                       | 173                                | 160                          | 210                                 | 260                 | 200                       | 2              | 6  |  |
| EP 13500DP RKT SINUS 2TH | 30776             | 13500       | 870                   | 60            | 591        | 204                       | 173                                | 160                          | 210                                 | 260                 | 200                       | 2              | 6  |  |
| EP 15000DP RKT SINUS 2TH | 30778             | 15000       | 890                   | 60            | 619        | 204                       | 173                                | 160                          | 210                                 | 260                 | 200                       | 2              | 6  |  |
| EP 16000DP RKT SINUS 2TH | 30048             | 16000       | 955                   | 60            | 644        | 204                       | 173                                | 160                          | 210                                 | 260                 | 200                       | 2              | 6  |  |
| EP 18000DP RKT SINUS 2TH | 30780             | 18000       | 1065                  | 60            | 722        | 204                       | 173                                | 160                          | 210                                 | 260                 | 200                       | 2              | 8  |  |
| EP 19000DP RKT SINUS 2TH | 30049             | 19000       | 1145                  | 60            | 780        | 204                       | 173                                | 160                          | 210                                 | 260                 | 200                       | 2              | 8  |  |
| EP 22000DP RKT SINUS 2TH | 30782             | 22000       | 1340                  | 60            | 910        | 204                       | 173                                | 160                          | 210                                 | 260                 | 200                       | 2              | 8  |  |
| EP 25000DP RKT SINUS 2TH | 30770             | 25000       | 1460                  | 60            | 998        | 204                       | 173                                | 160                          | 210                                 | 260                 | 200                       | 2              | 10   |  |
| EP 27000DP RKT SINUS 2TH | 30891             | 27000       | 1545                  | 60            | 1082       | 204                       | 173                                | 160                          | 210                                 | 260                 | 200                       | 2              | 10   |  |
| EP 30000DP RKT SINUS 2TH | 30784             | 30000       | 1680                  | 60            | 1162       | 204                       | 173                                | 160                          | 210                                 | 260                 | 200                       | 2              | 12   |  |
| EP 35000DP RKT SINUS 2TH | 33414             | 35000       | 1985                  | 60            | 1340       | 204                       | 173                                | 160                          | 210                                 | 260                 | 200                       | 2              | 12   |  |
| EP 40000DP RKT SINUS 2TH | 31481             | 40000       | 2350                  | 60            | 1585       | 204                       | 173                                | 160                          | 210                                 | 260                 | 200                       | 2              | 12   |  |
| EP 50000DP RKT SINUS 2TH | 33884             | 50000       | 2910                  | 60            | 1950       | 204                       | 173                                | 160                          | 210                                 | 260                 | 200                       | 2              | 16   |  |

Approximate values



Imperative to validate the DP cisterns and their sides with our technical service before excavation or placing distribution slab



If fitting a VF2 filter, inlet Ø 160mm is a better value option

# Dimensions of underground cisterns AT112 "Sinus REALIM"

Approximate values

| Article | Désignation                        | Effective volume (litres) | Weight (kg) | Diameter of opening (cm) | Length A (cm) | Width (cm) | Height of Inlet Ø 110 mm (E) Hs (cm) | Height of Siphon Ø 110 mm (TP) Hs (cm) | Height Ht (cm) without riser | Height HR (cm) with riser (in cm) | Ø inlet/outlet (mm) | Number of manholes Ø 6cm | With "Sinus" filter integrated in new grey riser | With "Basket" filter integrated in new black riser | With "Basic" Riser |
|---------|------------------------------------|---------------------------|-------------|--------------------------|---------------|------------|--------------------------------------|--|------------------------------|-----------------------------------|---------------------|--------------------------|--|--|--------------------|
| 34 126  | EP 2500 AT 112 SINUS 2TH           | 2500                      | 105         | 60                       | 112,5         | 230        | 159                                  | 118                                    | 145                          | Ø 60/190                          | 110                 | 1                        | YES  | NO   | NO                 |
| 34004   | EP 5000 AT 112 REALIM - POMPE      | 5000                      | 205         | 60                       | 235,5         | 230        | 159                                  | 118                                    | 145                          | Ø 60/190                          | 110                 | 1                        | YES  | NO   | NO                 |
| 34005   | EP 7500 AT 112 REALIM - POMPE      | 7500                      | 305         | 60                       | 358,5         | 230        | 159                                  | 118                                    | 145                          | Ø 60/190                          | 110                 | 1                        | YES  | NO   | NO                 |
| 34 127  | EP 10000 AT 112 REALIM - POMP 2TH  | 10000                     | 405         | 60                       | 481,5         | 230        | 159                                  | 118                                    | 145                          | Ø 60/190                          | 110                 | 2                        | YES  | NO   | NO                 |
| 34007   | EP 2500 AT 112 REALIM + POMPE      | 2500                      | 105         | 60                       | 112,5         | 230        | 159                                  | 118                                    | 145                          | Ø 60/190                          | 110                 | 1                        | YES  | NO   | NO                 |
| 34008   | EP 5000 AT 112 REALIM + POMPE      | 5000                      | 205         | 60                       | 235,5         | 230        | 159                                  | 118                                    | 145                          | Ø 60/190                          | 110                 | 1                        | YES  | NO   | NO                 |
| 34009   | EP 7500 AT 112 REALIM + POMPE      | 7500                      | 305         | 60                       | 358,5         | 230        | 159                                  | 118                                    | 145                          | Ø 60/190                          | 110                 | 1                        | YES  | NO   | NO                 |
| 34 128  | EP 10000 AT 112 REALIM + POMPE 2TH | 10000                     | 405         | 60                       | 481,5         | 230        | 159                                  | 118                                    | 145                          | Ø 60/190                          | 110                 | 2                        | YES  | NO   | NO                 |
| 34011   | EP 2500 SP SLZ REALIM - POMPE      | 2500                      | 92          | 60                       | 200           | 119        | 154                                  | 115                                    | 140                          | Ø 60/185                          | 110                 | 1 x Ø 60<br>1 x Ø 40     | YES  | NO   | NO                 |
| 34012   | EP 3500 SP SLZ REALIM - POMPE      | 3500                      | 120         | 60                       | 275           | 119        | 154                                  | 115                                    | 140                          | Ø 60/185                          | 110                 | 1 x Ø 60<br>1 x Ø 40     | YES  | NO   | NO                 |
| 34013   | EP 5000 SP SLZ REALIM - POMPE      | 5000                      | 180         | 60                       | 235           | 135,5      | 233                                  | 188                                    | 210                          | Ø 60/265                          | 110                 | 1                        | YES  | NO   | NO                 |
| 34014   | EP 7500 SP SLZ REALIM - POMPE      | 7500                      | 260         | 60                       | 357           | 135,5      | 233                                  | 188                                    | 210                          | Ø 60/265                          | 110                 | 1                        | YES  | NO   | NO                 |
| 34 135  | EP 10000 SP SLZ REALIM - POMPE 2TH | 10000                     | 350         | 60                       | 480           | 135,5      | 233                                  | 188                                    | 210                          | Ø 60/265                          | 110                 | 2                        | YES  | NO   | NO                 |
| 34016   | EP 2500 SP SLZ REALIM + POMPE      | 2500                      | 92          | 60                       | 200           | 119        | 154                                  | 115                                    | 140                          | Ø 60/185                          | 110                 | 1 x Ø 60<br>1 x Ø 40     | YES  | NO   | NO                 |
| 34017   | EP 3500 SP SLZ REALIM + POMPE      | 3500                      | 120         | 60                       | 275           | 119        | 154                                  | 115                                    | 140                          | Ø 60/185                          | 110                 | 1 x Ø 60<br>1 x Ø 40     | YES  | NO   | NO                 |
| 34018   | EP 5000 SP SLZ REALIM + POMPE      | 5000                      | 180         | 60                       | 235           | 135,5      | 233                                  | 188                                    | 210                          | Ø 60/265                          | 110                 | 1                        | YES  | NO   | NO                 |
| 34019   | EP 7500 SP SLZ REALIM + POMPE      | 7500                      | 260         | 60                       | 357           | 135,5      | 233                                  | 188                                    | 210                          | Ø 60/265                          | 110                 | 1                        | YES  | NO   | NO                 |
| 34 133  | EP 10000 SP SLZ REALIM + POMPE 2TH | 10000                     | 350         | 60                       | 480           | 135,5      | 233                                  | 188                                    | 210                          | Ø 60/265                          | 110                 | 2                        | YES  | NO   | NO                 |

## Dimensions of underground SP "Basic" cisterns Use EP on the exterior of buildings only

Single Skin SP BASIC cisterns for underground storage (page 19)

|                       | Article | Capacity (litres) | Weight (kg) | Length A (cm) | Width (cm) | Height Inlet (E) Hs (cm) | Height Siphon (TP) Hs (cm) | Height Ht (cm) without riser | Height HR (cm) with riser (Ø in cm) | Ø inlet/outlet (mm) | Number of manholes (cm) | With filter "B-Filter" integrated into riser REHC 400/300 | With filter "BASIC" integrated into riser REHC "BASIC" |
|-----------------------|---------|-------------------|-------------|---------------|------------|--------------------------|----------------------------|------------------------------|-------------------------------------|---------------------|-------------------------|---|--|
| EP-SP-SLZ 600 Basic   | 32257   | 600               | 30          | 170           | 78         | 79                       | 50                         | 73                           | Ø 40/112                            | 110                 | 2 x Ø 32                | YES   | NO   |
| EP-SP-SLZ 1100 Basic  | 32258   | 1100              | 44          | 170           | 78         | 129                      | 99                         | 124                          | Ø 40/163                            | 110                 | 2 x Ø 32                | YES   | NO   |
| EP-SP-SLZ 2500 Basic  | 31938   | 2500              | 82          | 200           | 119        | 149                      | 115                        | 140                          | Ø 40/175                            | 110                 | 2 x Ø 40                | NO  | YES  |
| EP-SP-SLZ 3500 Basic  | 31940   | 3500              | 110         | 275           | 119        | 149                      | 115                        | 140                          | Ø 40/175                            | 110                 | 2 x Ø 40                | NO  | YES  |
| EP-SP-SLZ 5000 Basic  | 32101   | 5000              | 170         | 235           | 135,5      | 225                      | 188                        | 210                          | Ø 40/250                            | 110                 | 1 x Ø 40                | NO  | YES  |
| EP-SP-SLZ 7500 Basic  | 32102   | 7500              | 250         | 357           | 135,5      | 225                      | 188                        | 210                          | Ø 40/250                            | 110                 | 1 x Ø 40                | NO  | YES  |
| EP-SP-SLZ 10000 Basic | 32103   | 10000             | 340         | 480           | 135,5      | 225                      | 188                        | 210                          | Ø 40/250                            | 110                 | 1 x Ø 40                | NO  | YES  |

All the underground cisterns need a downpipe filter installed.

The integrated basket or B filter is suitable for a roof surface area of 150m².

Above a roof area of 150m² install the High Flow VF1 cascade grill filter per 350m² section for all cisterns (SP "BASIC") (see summary)

Approximate values



# Dimensions of underground storm spillways for reduction and regulation of flow rate

Devices that are destined to reduce and regulate the volume of water ejected into the rainwater network (often under-sized) during heavy rainfall (often obliged under regulations)



|   | Article | Capacity (litres) | Weight (kg) | Diameter opening (cm) | Length A (cm) | Width (cm) | Height Inlet IN (cm) Ø 160 mm | Height overflow (TP) Hs (cm) Ø 160 mm | Height Ht (cm) Without riser | Height HR (cm) with adjustable riser 600CR | Ø Low outlet OUT (mm) | Number of manholes | Number of feet | Ø Inlet high (mm) | Ø Overflow (mm) |
|---|---------|-------------------|-------------|-----------------------|---------------|------------|-------------------------------|---------------------------------------|------------------------------|--|-----------------------|--------------------|----------------|-------------------|-----------------|
| <b>Spillways Single Skin SP-SZ underground</b>  |         |                   |             |                       |               |            |                               |                                       |                              |  |                       |                    |                |                   |                 |
| <b>DEVERSOIR 5000SP D160</b>                    | 31361   | 5000              | 180         | 60                    | 235           | 135        | 185                           | 180                                   | 225                          | 265  | 110                   | 1                  | -              | 160               | 160             |
| <b>DEVERSOIR 7500SP D160</b>                    | 31067   | 7500              | 260         | 60                    | 357           | 135        | 185                           | 180                                   | 225                          | 265  | 110                   | 1                  | -              | 160               | 160             |
| <b>EVERSOIR 10000SP D160</b>                    | 31068   | 10000             | 350         | 60                    | 480           | 135        | 185                           | 180                                   | 225                          | 265  | 110                   | 1                  | -              | 160               | 160             |
| <b>Spillways Double Skin DP-RKT underground</b> |         |                   |             |                       |               |            |                               |                                       |                              |  |                       |                    |                |                   |                 |
| <b>DEVERSOIR 3500DP D160</b>                    | 31384   | 3500              | 285         | 60                    | 182           | 204        | 177                           | 174                                   | 220                          | 260  | 110                   | 1                  | 4              | 160               | 160             |
| <b>DEVERSOIR 5000DP D160</b>                    | 31385   | 5000              | 365         | 60                    | 235           | 204        | 177                           | 174                                   | 220                          | 260  | 110                   | 1                  | 4              | 160               | 160             |
| <b>DEVERSOIR 6000DP D160</b>                    | 31729   | 6000              | 400         | 60                    | 264           | 204        | 177                           | 174                                   | 220                          | 260  | 110                   | 1                  | 4              | 160               | 160             |
| <b>DEVERSOIR 7000DP D160</b>                    | 31730   | 7500              | 480         | 60                    | 317           | 204        | 177                           | 174                                   | 220                          | 260  | 110                   | 1                  | 4              | 160               | 160             |
| <b>DEVERSOIR 9000DP D160</b>                    | 31731   | 9000              | 560         | 60                    | 370           | 204        | 177                           | 174                                   | 220                          | 260  | 110                   | 1                  | 4              | 160               | 160             |
| <b>DEVERSOIR 11000DP D200</b>                   | 31732   | 11000             | 620         | 60                    | 452           | 204        | 173                           | 170                                   | 220                          | 260  | 110                   | 2                  | 4              | 200               | 200             |
| <b>DEVERSOIR 12000DP D200</b>                   | 31733   | 12500             | 670         | 60                    | 534           | 204        | 173                           | 170                                   | 220                          | 260  | 110                   | 2                  | 6              | 200               | 200             |
| <b>DEVERSOIR 14000DP D200</b>                   | 31734   | 13500             | 870         | 60                    | 587           | 204        | 173                           | 170                                   | 220                          | 260  | 110                   | 2                  | 6              | 200               | 200             |
| <b>DEVERSOIR 15000DP D200</b>                   | 31103   | 15000             | 890         | 60                    | 619           | 204        | 173                           | 170                                   | 220                          | 260  | 110                   | 2                  | 6              | 200               | 200             |
| <b>DEVERSOIR 16000DP D200</b>                   | 31735   | 16000             | 955         | 60                    | 644           | 204        | 173                           | 170                                   | 220                          | 260  | 110                   | 2                  | 6              | 200               | 200             |
| <b>DEVERSOIR 18000DP D200</b>                   | 31736   | 18000             | 1065        | 60                    | 726           | 204        | 173                           | 170                                   | 220                          | 260  | 110                   | 2                  | 8              | 200               | 200             |
| <b>DEVERSOIR 19000DP D200</b>                   | 31737   | 19000             | 1145        | 60                    | 780           | 204        | 173                           | 170                                   | 220                          | 260  | 110                   | 2                  | 8              | 200               | 200             |
| <b>DEVERSOIR 22000DP D200</b>                   | 31738   | 22000             | 1340        | 60                    | 916           | 204        | 173                           | 170                                   | 220                          | 260  | 110                   | 2                  | 8              | 200               | 200             |
| <b>DEVERSOIR 25000DP D200</b>                   | 31739   | 25000             | 1460        | 60                    | 998           | 204        | 173                           | 170                                   | 220                          | 260  | 110                   | 2                  | 10             | 200               | 200             |
| <b>DEVERSOIR 27000DP D200</b>                   | 31311   | 27000             | 1515        | 60                    | 1080          | 204        | 173                           | 170                                   | 220                          | 260  | 110                   | 2                  | 10             | 200               | 200             |
| <b>DEVERSOIR 30000DP D200</b>                   | 31740   | 30000             | 1680        | 60                    | 1162          | 204        | 173                           | 170                                   | 220                          | 260  | 110                   | 2                  | 12             | 200               | 200             |
| <b>DEVERSOIR 35000DP D200</b>                   | 33415   | 35000             | 1985        | 60                    | 1340          | 204        | 173                           | 170                                   | 220                          | 260  | 110                   | 2                  | 12             | 200               | 200             |
| <b>DEVERSOIR 40000DP D200</b>                   | 31741   | 40000             | 2350        | 60                    | 1585          | 204        | 173                           | 170                                   | 220                          | 260  | 110                   | 2                  | 12             | 200               | 200             |
| <b>DEVERSOIR 50000DP D200</b>                   | 33886   | 50000             | 2910        | 60                    | 1950          | 204        | 173                           | 170                                   | 220                          | 260  | 110                   | 2                  | 16             | 200               | 200             |

Approximate values

## Principle of spillway operation

Consider a cistern with an outlet point filling with a liquid. A formula links outflow with height of liquid, h. We can hypothesise the following:

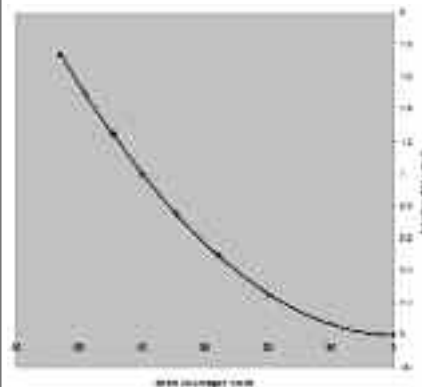
- The cross section S of the cylinder in front of the outlet is very large:  $s \ll S$ .
- Liquid viscosity is negligible (cylinder is too narrow)
- The liquid is incompressible
- If we now look at the situation where outflow is the same as inflow (dynamic equilibrium)

$$Q = S \times V = S \sqrt{2 \times g \times h} \quad \text{with} \quad V = \sqrt{2 \times g \times h} \quad S = \pi \times R^2$$

$$Q = 0,009 \sqrt{2 \times 9,81 \times 1,74} \quad S = \pi \times 0,05^2$$

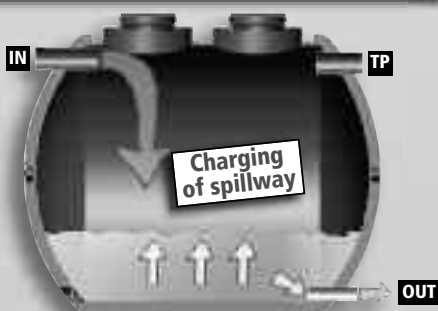
$$Q = 0,0153 \text{ (m}^3/\text{s)} \quad S = 0,0079 \text{ m}^2$$

$$Q = 52 \text{ l/s}$$



| Height of water in water, in m | Flow volume, in l/s |
|--------------------------------|---------------------|
| 1,74                           | 53                  |
| 1,5                            | 49                  |
| 1,25                           | 44,5                |
| 1                              | 40                  |
| 0,75                           | 34,5                |
| 0,5                            | 28                  |
| 0,25                           | 20                  |
| 0                              | 0                   |

Imperative to validate the DP cisterns and their sides with our technical service before excavation or placing distribution slab



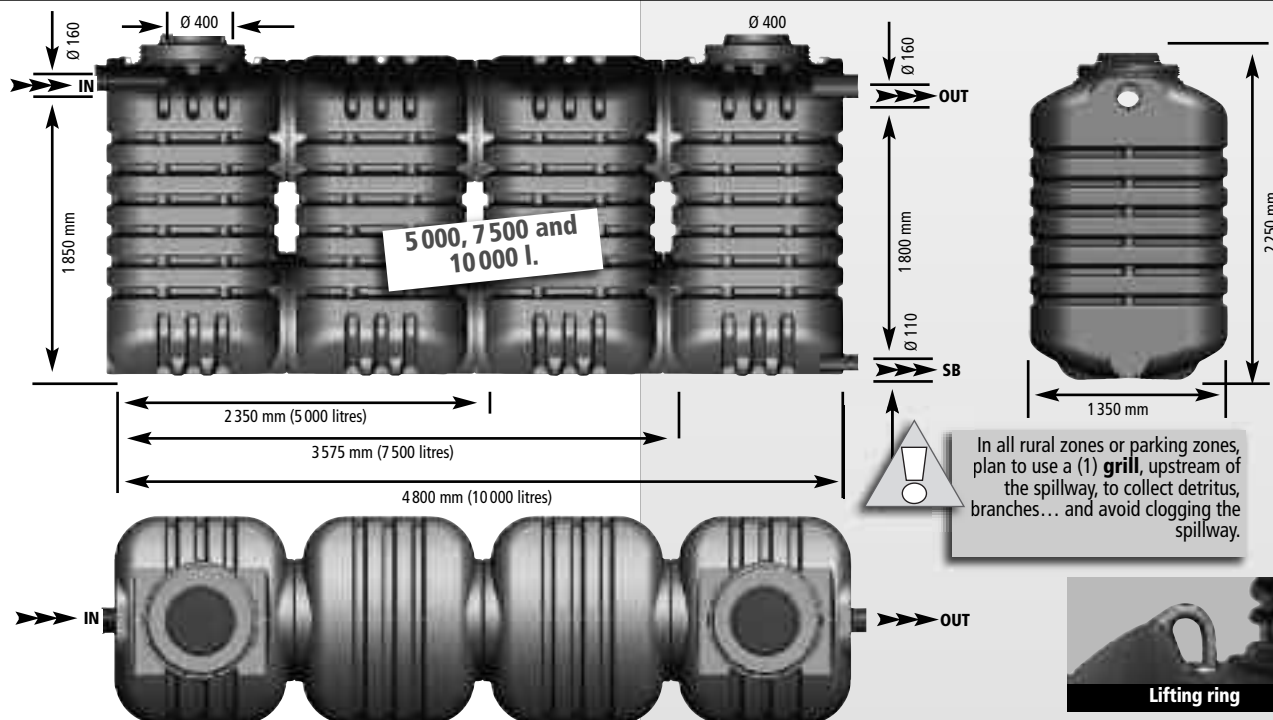
- **Screw-on riser REHC 600/250**, art. 32 233, to screw on all manholes Ø 600 mm (sold separately)
- **+ reinforced cap**, art. 30880 adaptable to all manholes Ø 600 mm (sold separately)

In all rural zones or parking zones, plan to use a (1) **grill**, upstream of the spillway, to collect detritus, branches... and avoid clogging the spillway.

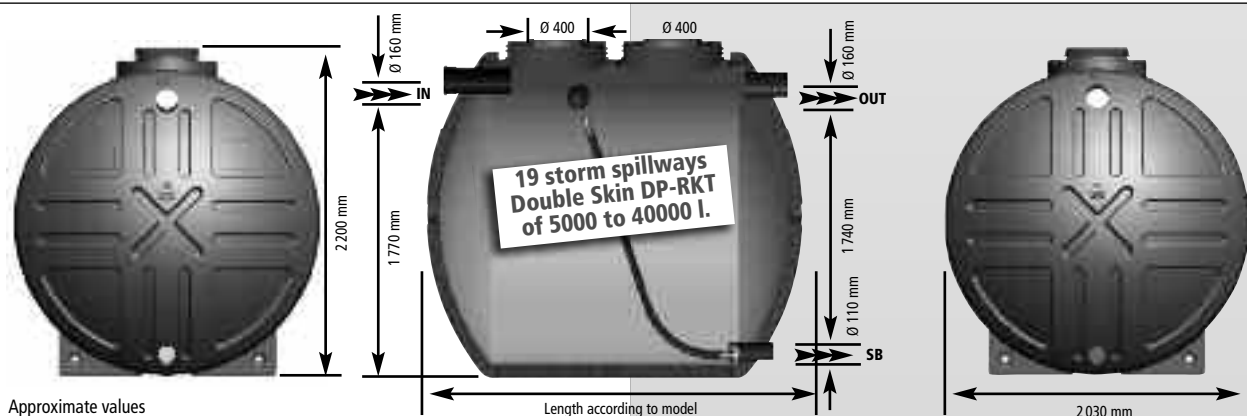


# Dimensions of underground storm spillways for reduction and regulation of flow rate

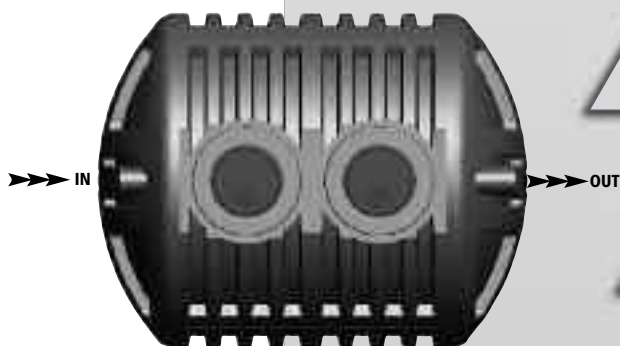
## Storm spillway Single Skin SP-SZ of 5000, 7500 and 10000 l



## 19 storm spillways Double Skin DP-RKT of 5000 to 40000 l.



- **Screw-on riser REHC 600/250**, art. 32 233, to screw on all manholes Ø 600 mm (sold separately)
- **+ reinforced cap**, art. 30880 adaptable to all manholes Ø 600 mm (sold separately)



- For any storm spillway installation:
- you must consult our EP23 Rainwater Harvesting User Manual supplied with every unit,
  - strictly follow all our installation advice,
  - entrust installation to a qualified fitter,
  - you must check DP cisterns and their sites with out technical service

Serial number – date of fabrication

**New**

# Flow regulators

Sold separately for all storm spillways.

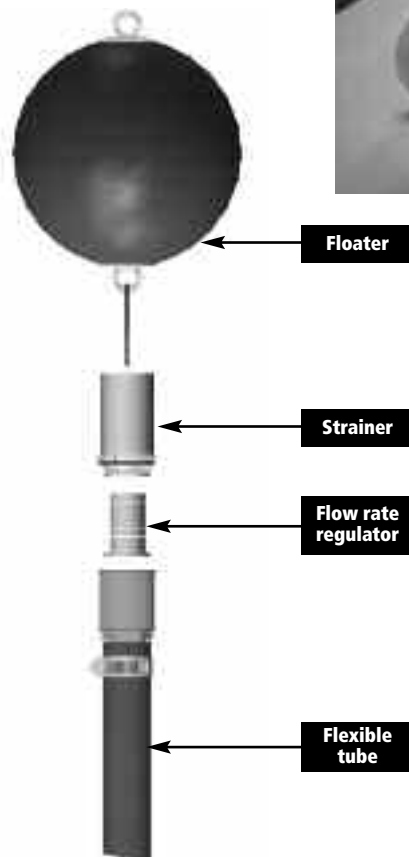
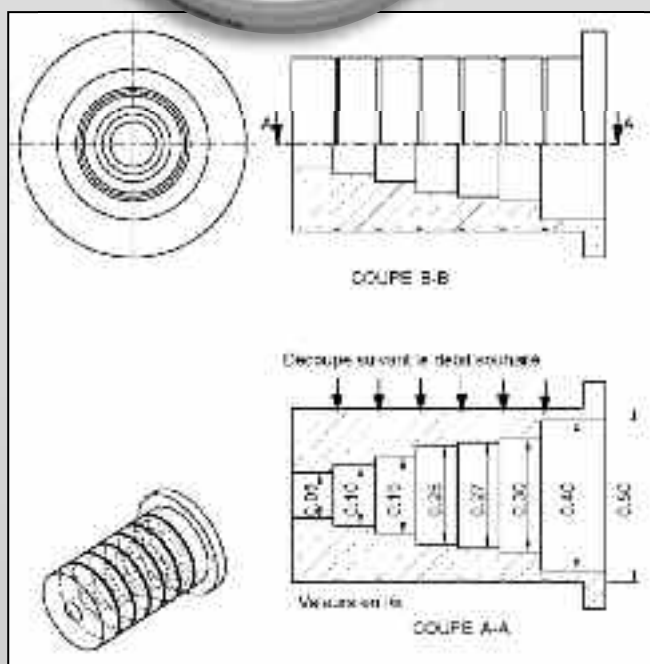
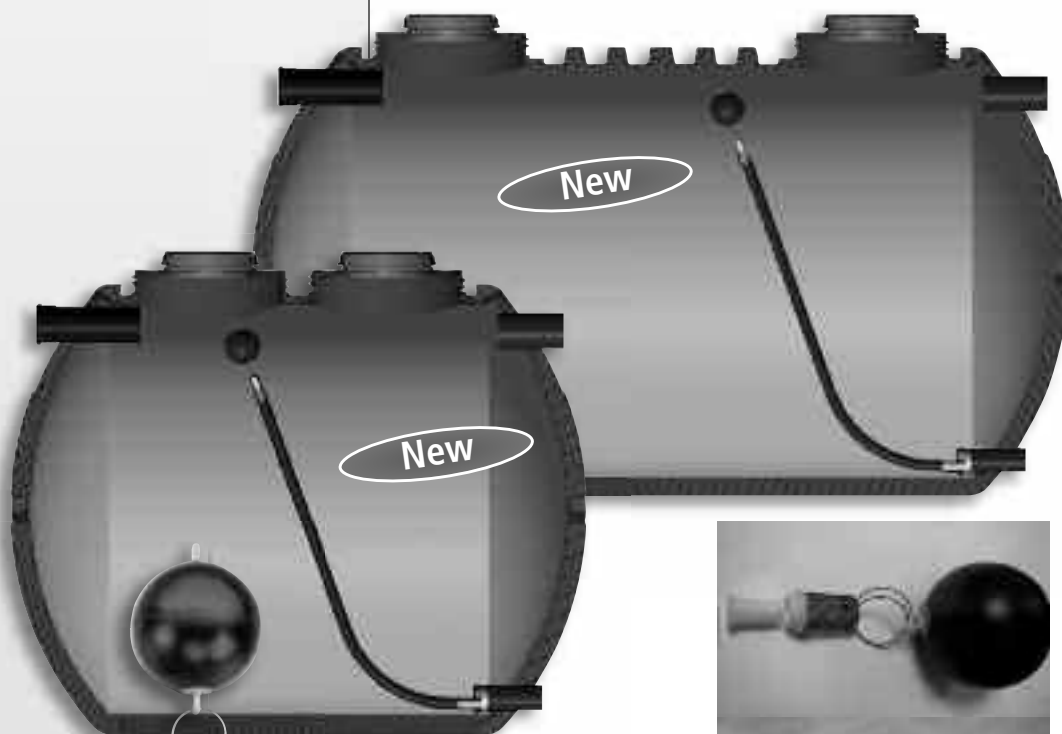
## Flow regulators

There are 2 flow regulators:

- 1" for cisterns up to 5000 litres, with adjustable discharge rate. From 0.05l/s to 0.5l/s (with a conical PE insert in the strainer, to be cut along the lines for the desired flow) (art. 34497 KIT REGUL.DE DEBIT 0.05-0.5L/S)
- 1 1/2" for cisterns of 7500 to 11 000 litres with discharge rate of 1l/s (art. 34496 KIT REGUL.DE DEBIT 1L/S)

The flow regulator:

- for a constant flow rate from the start,
- is composed of a floater, a strainer, a flexible tube and a fixation point for mounting the lower connection in HDPE Ø 110



**New**

# Placement of straps on the AT112

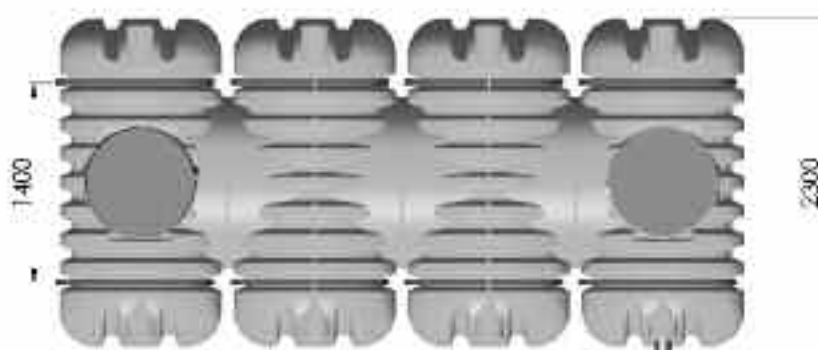
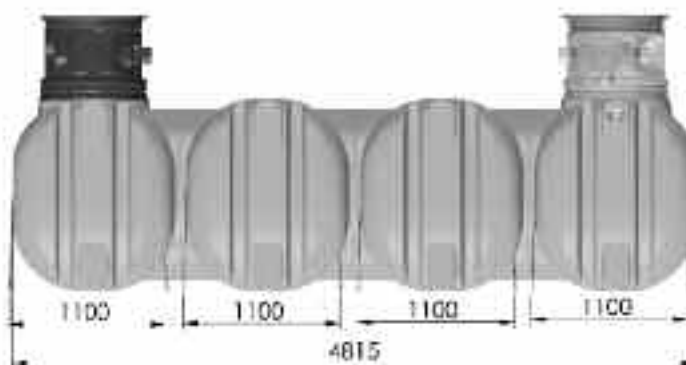
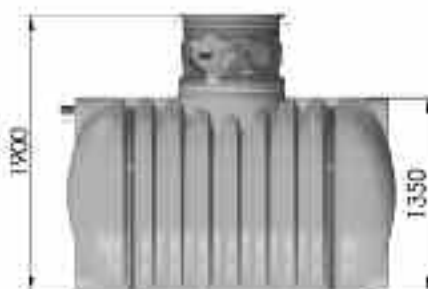
Sold separately

## Example: Position of straps on the 10 000 AT112

| EP AT112 | EB PLANTCO<br>AT112<br>Art. 34577 | EC PLANTCO<br>AT112<br>Art. 34578 |
|----------|-----------------------------------|-----------------------------------|
| 2500     | 1                                 | 0                                 |
| 5000     | 1                                 | 2                                 |
| 7500     | 1                                 | 4                                 |
| 10000    | 1                                 | 6                                 |

### Options sold separately:

- Kit "Plantco" Basic set AT112 (Art. 34577)
- 4 anchors  
+ 1 driving bar  
+ 2 straps
- Kit "Plantco" Supplementary set AT112 (Art. 34578)
- 2 anchors + 1 strap





# DP Underground Fire Water Reserve

(other uses : storage for green spaces, sports areas)



## Double Skin DP, linkable for unlimited storage, 120 000 litres minimum

Recuperation of rainwater with a view to reusing it as a fire water reserve. Fitting 3 (or more) cisterns enables a reserve capacity of 120 000 litres, minimum. These reserves are obligatory, in certain situations, for businesses and community groups that don't have easy or close access to a fire water network (hydrants or standpipes).

The set includes:

- 1 Standard Base Set (EB STD),
- 1 Supplementary Set with drainage (EC VID)
- 1 or more Standard Supplementary Sets (EC STD).

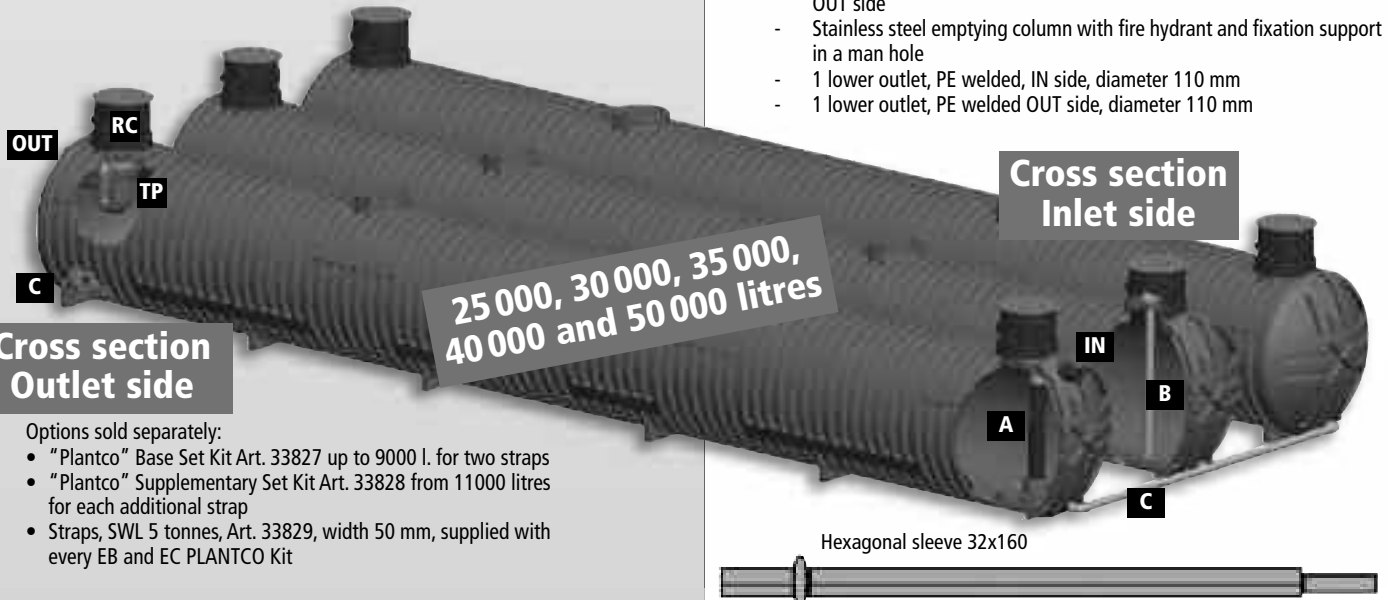


You must have DP cisterns and their sides checked with our technical service before embarking on excavations or placing distribution slab

|            |   |
|------------|---|
| <b>IN</b>  | Inlet Ø 200 mm of rainwater                             |
| <b>OUT</b> | Outlet Ø 200 mm of rainwater                            |
| <b>TP</b>  | Overflow siphon, flow regulation with anti-rodent grill |
| <b>A</b>   | Calm inlet tube Ø 200 mm                                |
| <b>B</b>   | emptying rod  |
| <b>C</b>   | Connection sides IN and OUT lower exit                  |
| <b>RC</b>  | Riser   |

First saving, placement without needing to fill up with mains water first  
Check the technical forms of products before choosing  
A fire water reserve should have a minimum capacity of 120 000 litres, and be made of at least 3 cisterns:

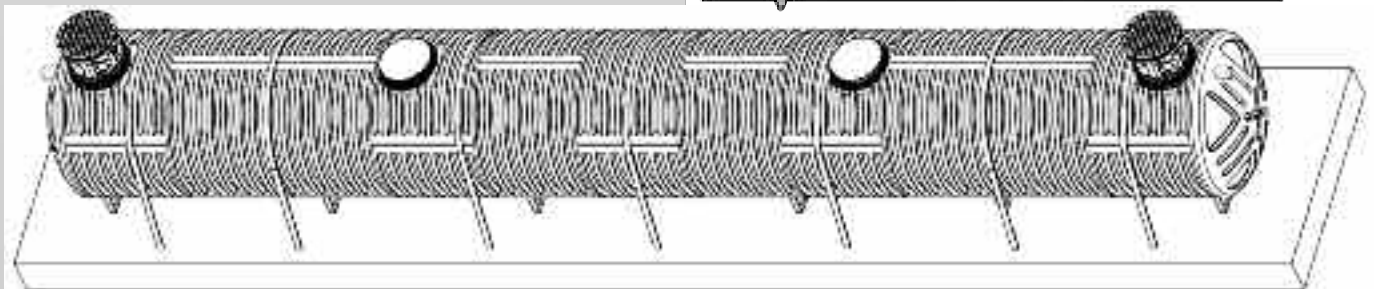
- Standard Base Set for Fire Water Reserve 25 000, 30 000, 35 000, 40000, 50000 litres Double Skin equipped with:
  - Manholes, diameter 600 mm equipped with a REHC 600/580 riser, with reinforced cap and child safety device, situated 1x IN side and 1x OUT side,
  - Calm inlet baffle, diameter 200 mm allowing the arrival of pre-filtered water at the same time as avoiding the re-suspension of sand (sediments) and allowing continued water oxygenation
  - Overflow evacuation siphon, regulating flow and, according to regulations, filtering to a diameter of 200 mm, independent and effective, second filtration, aspiration, sited above the outlet water level. Pre-filtered water containing finer particles (pollen...) and fatting, floating particles (hydrocarbons, oils,...), filtered a second time by skimming (pool filter) which sucks up all floating particles without using energy.
  - 1 lower outlet, PE welded, IN side, diameter 110 mm
  - 1 lower outlet, PE welded OUT side, diameter 110 mm
- Supplementary Set with drainage for Fire Water Reserve: 25 000, 30 000, 35000, 40000 et 50000 litres Double Skin equipped with:
  - Manholes, diameter 600 mm equipped with a REHC 600/580 riser, with reinforced cap and child safety device, situated 1x IN side and 1x OUT side,
  - The other manholes are not pierced or equipped with 1 screw cap, diameter 400
  - 1 lower outlet, PE welded, IN side, diameter 110 mm
  - 1 lower outlet, PE welded OUT side, diameter 110 mm
- Standard Supplementary Sets for Fire Water Reserve 25 000, 30000, 35000, 40000 and 50000 litres Double Skin, equipped with:
  - Manholes, diameter 600 mm equipped with a REHC 600/580 riser, with reinforced cap and child safety device, situated 1x IN side and 1x OUT side
  - Stainless steel emptying column with fire hydrant and fixation support in a man hole
  - 1 lower outlet, PE welded, IN side, diameter 110 mm
  - 1 lower outlet, PE welded OUT side, diameter 110 mm



### Cross section Outlet side

Options sold separately:

- "Plantco" Base Set Kit Art. 33827 up to 9000 l. for two straps
- "Plantco" Supplementary Set Kit Art. 33828 from 11000 litres for each additional strap
- Straps, SWL 5 tonnes, Art. 33829, width 50 mm, supplied with every EB and EC PLANTCO Kit



40 m³ cistern with straps, SWL (Safe Working Load) 5 tonnes, width 50 mm, anchored with the Plantco Kit (1 EB PLANTCO Base Set + 6 EC PLANTCO Supplementary Kits)

# DP Underground Fire Water Reserve

(other uses : storage for green spaces, sports areas)

## Plantco Anchorage Kit

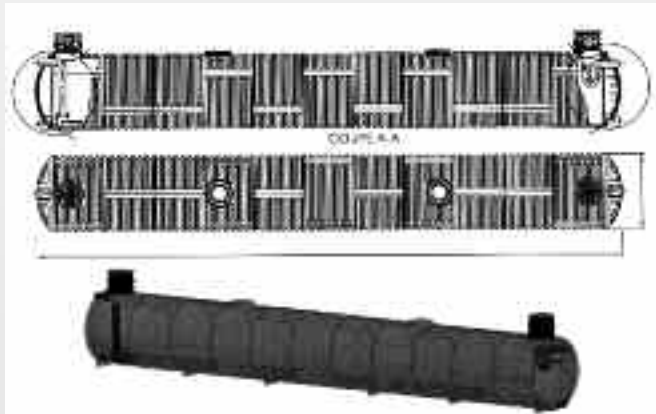
| STORAGE DP    | EB PLANTCO Art. 33827 | EC PLANTCO Art. 33828 |
|---------------|-----------------------|-----------------------|
| 3 500 DP RKT  | 1                     | 1                     |
| 5 000 DP RKT  | 1                     | 1                     |
| 6 000 DP RKT  | 1                     | 2                     |
| 7 500 DP RKT  | 1                     | 2                     |
| 9 000 DP RKT  | 1                     | 2                     |
| 11 000 DP RKT | 1                     | 3                     |
| 12 500 DP RKT | 1                     | 3                     |
| 13 500 DP RKT | 1                     | 3                     |
| 15 000 DP RKT | 1                     | 3                     |
| 16 000 DP RKT | 1                     | 3                     |
| 18 000 DP RKT | 1                     | 3                     |
| 19 000 DP RKT | 1                     | 3                     |
| 22 000 DP RKT | 1                     | 4                     |
| 25 000 DP RKT | 1                     | 4                     |
| 27 000 DP RKT | 1                     | 5                     |
| 30 000 DP RKT | 1                     | 5                     |
| 35 000 DP RKT | 1                     | 6                     |
| 40 000 DP RKT | 1                     | 7                     |
| 50 000 DP RKT | 1                     | 9                     |

Options sold separately:

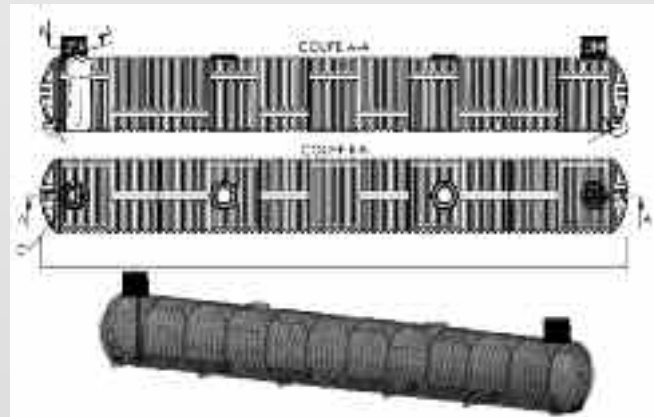
- "Plantco" Base Set Kit Art. 33827 up to 9000 l. for two straps
- "Plantco" Supplementary Set Kit Art. 33828 from 11000 litres for each additional straps
- Straps, SWL 5 tonnes, Art. 33829, width 50mm, supplied with every EB and EC PLANTCO Kit.

**For all linking of underground cisterns, it is important to place the cisterns on a reinforced flat and horizontal platform.** Imperatively, connections (elbow-, T-joints, etc.) and junction tubes must be laid into a stabilised sand support (dry mix of 1 m³ of sand to 200 kg of cement), in order to avoid slipping of junctions tubes and connections, cracking of the solder or crushing of the watertight join.

## Example of an EB Base Reserve



## Example of an EC Supplementary Reserve



|                                   | Article | Effective volume (litres) | Weight (kg) | Diameter of opening (cm) | Diameter of main body (cm) | Length A (cm) | Width (cm) | Inlet height IN He (cm) | Overflow height (TP) Hs (cm) | Height without riser Ht (cm) | Height HR (cm) with riser REHC 600/580 | Ø Lower outlet OUT (mm) | Number of manholes | Number of feet | Ø Upper inlet (mm) | Ø Overflow (mm) |
|-----------------------------------|---------|---------------------------|-------------|--------------------------|----------------------------|---------------|------------|-------------------------|------------------------------|------------------------------|--|-------------------------|--------------------|----------------|--------------------|-----------------|
| DP Underground Fire Water Reserve |         |                           |             |                          |                            |               |            |                         |                              |                              |  |                         |                    |                |                    |                 |
| RESINC EBSTD 25000                | 33902   | 25000                     | 1460        | 60                       | -                          | 998           | 204        | 173                     | 170                          | 220                          | 260                                    | 110                     | 2                  | 10             | 200                | 200             |
| RESINC ECSTD 25000                | 33904   | 25000                     | 1460        | 60                       | -                          | 998           | 204        | 173                     | 170                          | 220                          | 260                                    | 110                     | 2                  | 10             | -                  | -               |
| RESINC EBSTD 30000                | 33905   | 30000                     | 1680        | 60                       | -                          | 1162          | 204        | 173                     | 170                          | 220                          | 260                                    | 110                     | 2                  | 12             | 200                | 200             |
| RESINC ECSTD 30000                | 33907   | 30000                     | 1680        | 60                       | -                          | 1162          | 204        | 173                     | 170                          | 220                          | 260                                    | 110                     | 2                  | 12             | -                  | -               |
| RESINC EBSTD 35000                | 33908   | 35000                     | 1985        | 60                       | -                          | 1340          | 204        | 173                     | 170                          | 220                          | 260                                    | 110                     | 2                  | 12             | 200                | 200             |
| RESINC ECSTD 35000                | 33910   | 35000                     | 1985        | 60                       | -                          | 1340          | 204        | 173                     | 170                          | 220                          | 260                                    | 110                     | 2                  | 12             | -                  | -               |
| RESINC EBSTD 40000                | 33911   | 40000                     | 2350        | 60                       | -                          | 1585          | 204        | 173                     | 170                          | 220                          | 260                                    | 110                     | 2                  | 12             | 200                | 200             |
| RESINC ECSTD 40000                | 33941   | 40000                     | 2350        | 60                       | -                          | 1585          | 204        | 173                     | 170                          | 220                          | 260                                    | 110                     | 2                  | 12             | -                  | -               |
| RESINC EBSTD 50000                | 33942   | 40000                     | 2910        | 60                       | -                          | 1950          | 204        | 173                     | 170                          | 220                          | 260                                    | 110                     | 2                  | ?              | 200                | 200             |
| RESINC ECSTD 50000                | 33944   | 40000                     | 2910        | 60                       | -                          | 1950          | 204        | 173                     | 170                          | 220                          | 260                                    | 110                     | 2                  | ?              | -                  | -               |

Approximate values

There is also a range of supplementary cisterns to store fire water equipped with an emptying rod and pump connection:

- RESINC ECVID 25000 Art. : 33903
- RESINC ECVID 30000 Art. : 33906
- RESINC ECVID 35000 Art. : 33909
- RESINC ECVID 40000 Art. : 33940
- RESINC ECVID 50000 Art. : 33943

# Guide to placement of underground cisterns

- All plantations above buried works forbidden
- All rainwater transit forbidden



**Mark out the implantation zone of the DP EP cistern. Carefully scrape off the topsoil. Dig the excavation and remove the earth**



**Special cases of placement in groundwater and in circulation zones, with PLANTCO anchorage.**

**Fitment of connections buried in the stabilised sand backfill.**



**Prepare the bottom of the excavation with 30cm of stabilised sand\*, free from any sharp or cutting object.**



**Lower the DP EP cistern so that it is perfectly horizontal on the bottom of the excavation and in the correct orientation (relative to inlet/outlet). If necessary, connect the constituent cisterns of the DP EP cistern.**





# Guide to placement of underground cisterns

- All plantations above buried works forbidden
- All rainwater transit forbidden



Backfill laterally and symmetrically to a 30 cm width using stabilised sand\*, free from all sharp and cutting objects. (\*) dry mix of 1m³ of sand to 200kg of cement.



Connect channelling between habitation and the DP EP cistern (inlet, outlet and upper ventilation) using a slope between 2% and 4%. The connection of channelling should only be done after lateral backfilling has been completed.



Final backfill with topsoil. The inspection caps should be left clear and visible for maintenance.



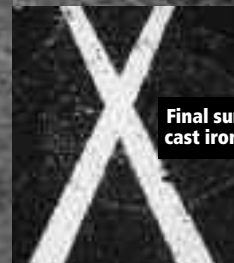
Special case.



Special case. Vehicle passage and parking: load bearing slab with a defined load, stabilised sand etc.



Final surface finish, cast iron cap EN124.



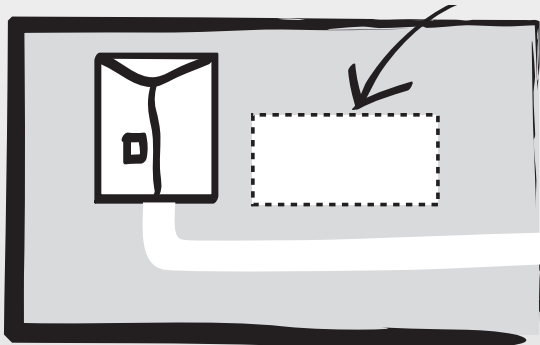


# Guide to placement of underground cisterns

## 1.1 Rules of placement of the EP underground cistern

The tube bringing rainwater to the EP underground cistern must have a slope between 1 % minimum and 3 % maximum.

The EP underground cistern must be situated away from the passage of any moving or stationary loaded vehicles except by taking particular placement precautions and must stay accessible for maintenance and possible drainage.



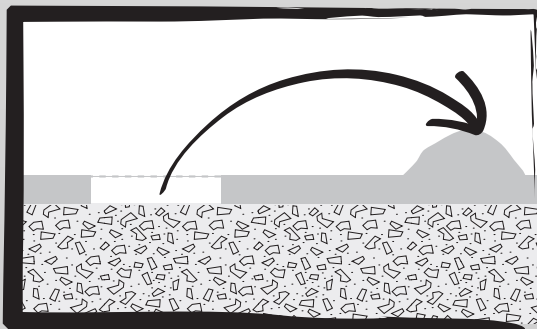
## 1.2 Execution of excavation for the placement of the EP underground cistern.

Earthworks allowing the placement of the EP underground cistern must conform to the Norms NF P98-331 and NF P98-332.



### 1.2.1 Size and execution of the digs for the EP underground cistern

The size of the dig must allow for the placement of the EP underground cistern such that no sides come into contact with the sides of the dig before backfilling. After correct sizing of the dig, outline the underground installation zone exclusively, as close as possible to the residence and away from the passage of any moving or stationary loaded vehicles. Carefully remove the topsoil and store in a reservation zone for landscaping at the end of works. After digging and removal of rubble, the base of the dig is dug down to a further depth of 0.20 m below the side where the lower, exterior surface of the EP underground cistern, in order for the bed of stabilised sand to be laid (stabilised sand = dry mix 1 m<sup>3</sup> of sand with 200 kg of cement). The depth to the bottom of the dig and the placement of the cistern must both take into account of the rainwater pipe work which, bringing water on a 1-3% slope, needs to be in the correct position to join raw rainwater collect box, or the buried raw rainwater network external to the cistern, to the inlet of the EP underground cistern.

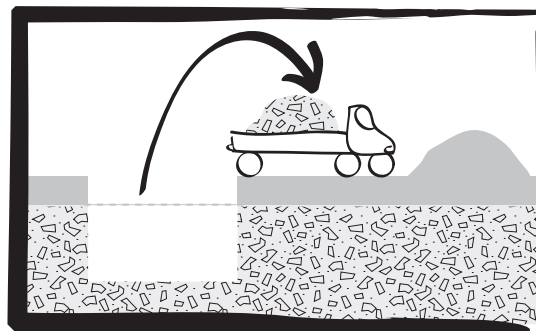


### 1.2.2 To lay the placement bed

The placement bed is made up of stabilised sand

The thickness of the placement bed is 0.20 m.

The surface of the bed is dressed and compacted so the tank does not rest of any hard point or weak spot. The flatness and horizontal nature of the placement bed must be ensured. In cases of difficult soils (example: impermeable, clay, etc) or ground water, the placement bed must have a 0.30 m layer of stabilised sand. Where cisterns are joined, it is imperative to install a reinforced platform and support tubes and joints with stabilised sand.



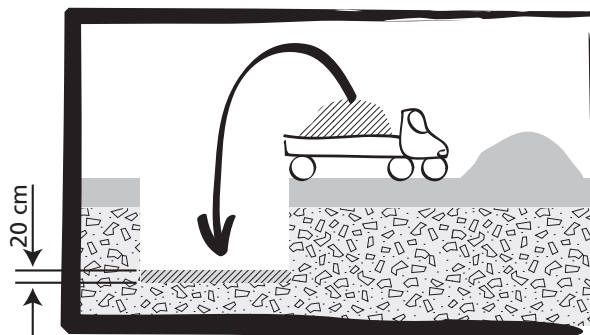
## 1.3 Placement of the EP underground cistern



### 1.3.1 General instructions

The EP underground cistern is placed perfectly horizontally on the placement bed of stabilised sand. The level of the EP cistern's inlet must take into account

- the direction of pipe work (inlet/outlet)
- the finished ground level
- the access caps, they must remain accessible and apparent for maintenance and any possible drainage.



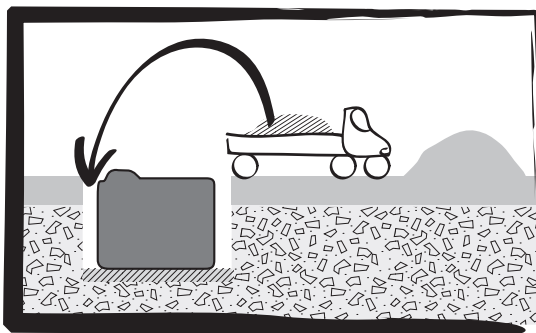
**When backfilling all SP and AT 112 cisterns, use stabilized sand: dry mix 1 m<sup>3</sup> of sand to 200kg of cement**

# Guide to placement of underground cisterns



## 1.3.2 Lateral backfilling

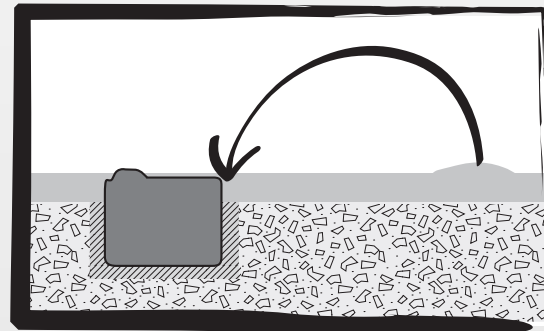
Backfilling the sides of the EP underground cistern done symmetrically, with successive layers, with stabilised sand. All backfilling must be done with stabilised sand that is free from any pointy or slicing object (stabilised sand = dry mix 1 m<sup>3</sup> of sand with 200 kg of cement) and to a minimum width of 0.20 m around the EP underground cistern.



## 1.3.3 Joins and connexion points

Joins and connexion of feed pipe work, of the overflow, and the outlet, as well as the service tube, the pump, control module and any other connexions in the system must be made watertight.

The service tube joined to the control module must have a watertight wall conduit to the right of the foundation piercing, to avoid flooding of the building if the overflow and the dirty water outlet are blockage (see page 25). In order to take into account of natural soil settling after the final backfilling, the connexions must be made of supple elastomer or rubber so they can bend.



## 1.3.4 Final backfilling

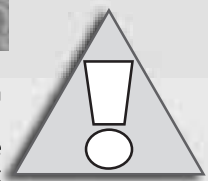
The final backfilling of the EP underground cistern is done, after joints are connected and riser fitted, with stabilised sand covering the top but below pipes connected to the riser, in order to prevent crushing of tubes and settling on risers with the final backfill load. The final backfilling is done with the topsoil that was stored separately when it was stripped and pointy, stony objects were removed. Final backfilling is done with a succession of layers until it is higher than the level of the soil, though keeping access caps on both sides both apparent and accessible, taking account of future settling.



**IMPORTANT:** special cases need installation precautions, such as:

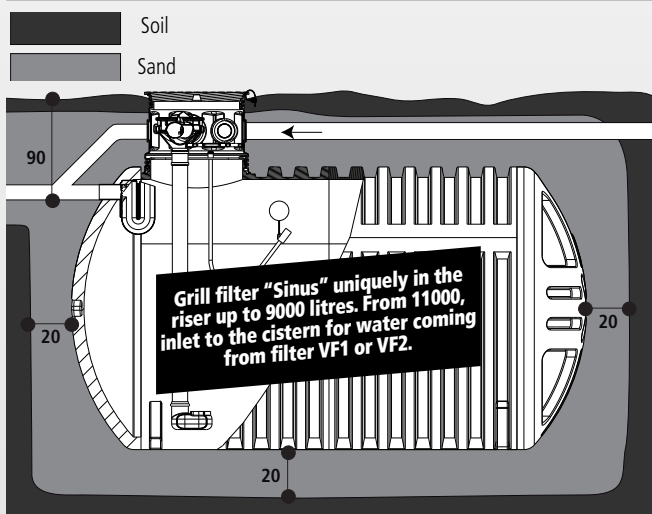
The cases below require indispensable supplementary block work, in either lean mix concrete or stabilised sand, or in concrete blocks or reinforced concrete, or with support walls, or a floor to even out pressure, or a platform. Choices should be discussed on a case-by-case basis with the contractor.

- **Passing and parking of vehicles**, (distribution slab with definition of load, stabilized sand ...)
- **Washing areas**, (distribution slab with definition of load, stabilized sand ...)
- **Non stabilized soil**, (stabilized sand, support wall...)
- **Presence of underground water or streams**, (stabilized sand, anchoring sill with hooks avec corrosion-resistant crochets, casing...)
- **Periodic rises of the water table**, (stabilized sand ...)
- **In cases where there is a permanent water presence of water, the underground cistern EP-DP, adapted to placement in ground water, is positioned on a reinforced platform made of quick-setting cement and anchored. It is important to fill the cistern with water up to the ground water level as the backfilling progresses in order to even out the pressure. Backfilling is done with stabilised sand with added 200 kg/m<sup>3</sup> (2/3 cement + 1/3 quick-setting cement).**  
The EP-SP and EP-AT112 cisterns cannot be strapped
- **Impermeable soil** preventing the infiltration of water, (stabilized sand to avoid backfill leeching...)
- **Sloping terrain > to 5 %**, (support wall, stabilized sand, semi-buried placement...)
- **Presence of hard rock in the sub-soil**, (stabilized sand ...)
- **Drainage of stream water is necessary upstream** of the installation when the terrain slope > to 5 %, to avoid backfill leeching.



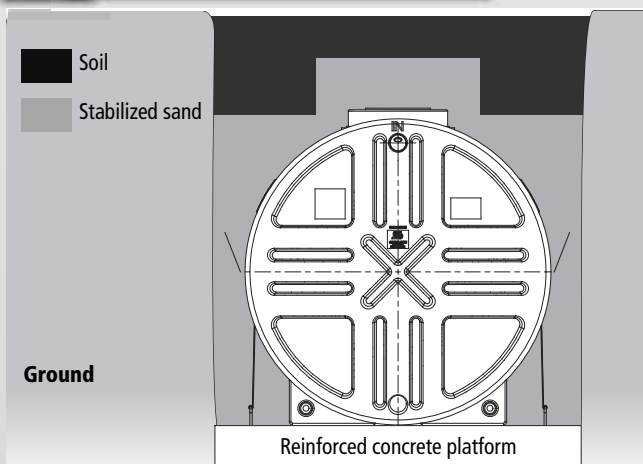
# Guide to placement of underground cisterns

**Underground placement of empty DP-RKT units, with a new grey REHC 600/580 riser "Sinus" and a supplementary REHC 600/150 riser or a REHC 600 CR riser.**



- All plantations forbidden above underground works

Be careful : only one supplementary screw riser REHC 600/150 (sold separately) can be installed on the original one

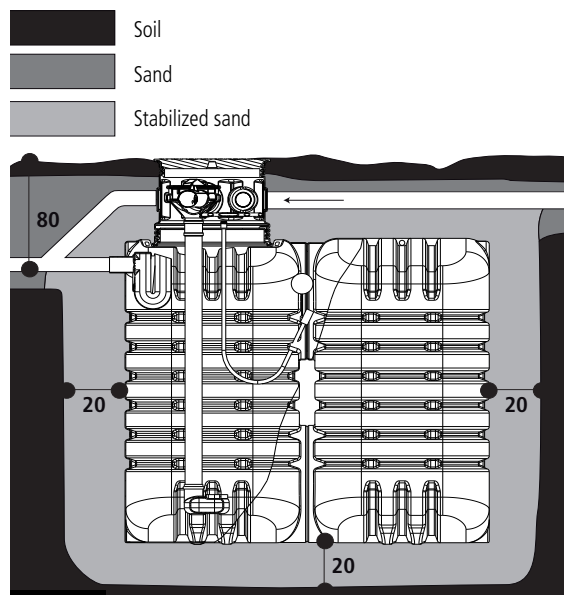


**For placement of a Double Skin unit in areas with high water table use straps (SWL 5 tonnes, width 50mm) hooked on to a reinforced concrete platform with the "Plantco" kit.**

Options sold separately:

- "Plantco" Base Set Kit Art. 33827 up to 9000 l. for two straps
- "Plantco" Supplementary Set Kit Art. 33828 from 11000 litres for each additional strap
- Straps, SWL 5 tonnes, Art. 33829, width 50 mm, supplied with every EB and EC PLANTCO Kit

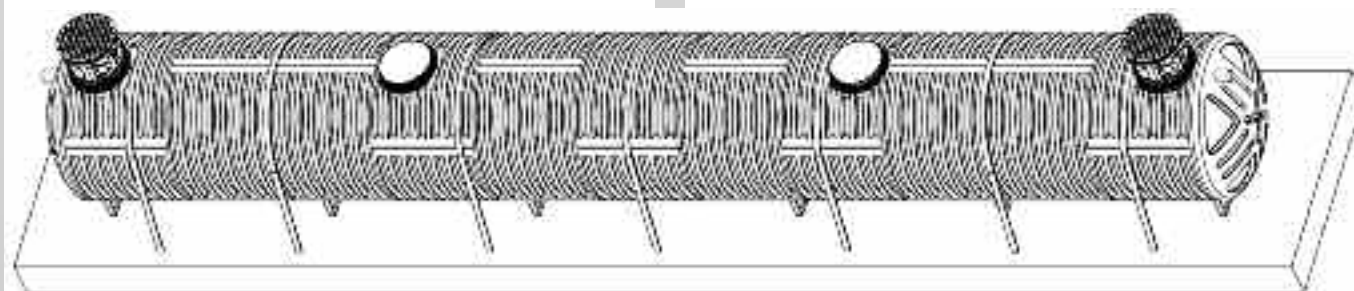
**Underground placement of units SP-SZ and AT 112 with a new riser REHC 600/580 and the supplementary screw riser REHC 600/150**



**When backfilling all SP and AT 112 cisterns, use stabilized sand: dry mix 1 m<sup>3</sup> of sand to 200kg of cement**

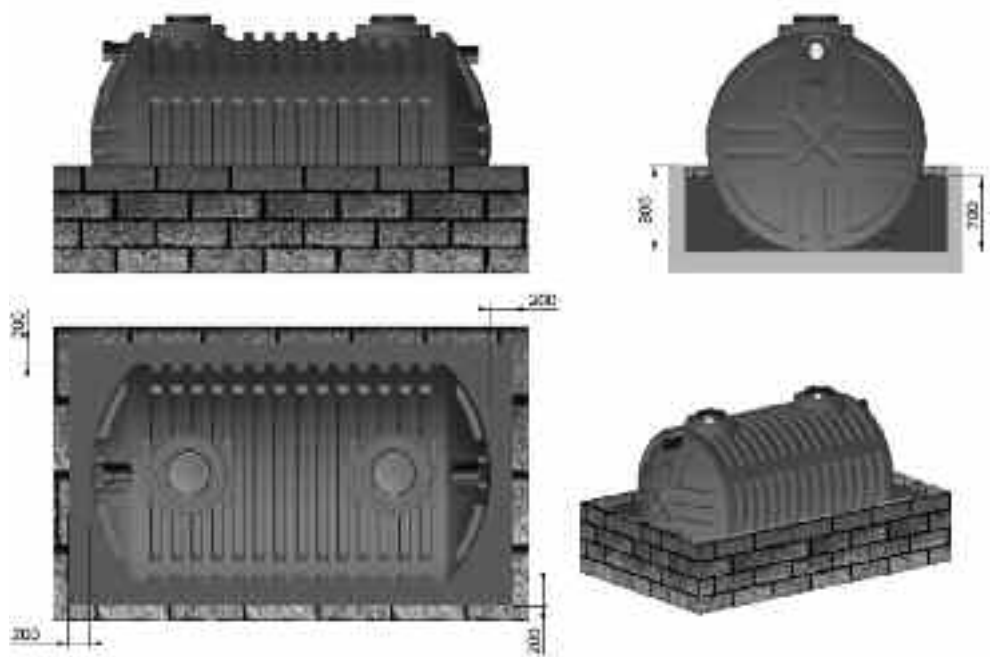
| STOCKAGE EP & ANC DP | EB PLANTCO Art. 33827 | EC PLANTCO Art. 33828 |
|----------------------|-----------------------|-----------------------|
| 3 500 DP RKT         | 1                     | 1                     |
| 5 000 DP RKT         | 1                     | 1                     |
| 6 000 DP RKT         | 1                     | 2                     |
| 7 500 DP RKT         | 1                     | 2                     |
| 9 000 DP RKT         | 1                     | 2                     |
| 11 000 DP RKT        | 1                     | 3                     |
| 12 500 DP RKT        | 1                     | 3                     |
| 13 500 DP RKT        | 1                     | 3                     |
| 15 000 DP RKT        | 1                     | 3                     |
| 16 000 DP RKT        | 1                     | 3                     |
| 18 000 DP RKT        | 1                     | 3                     |
| 19 000 DP RKT        | 1                     | 3                     |
| 22 000 DP RKT        | 1                     | 4                     |
| 25 000 DP RKT        | 1                     | 4                     |
| 27 000 DP RKT        | 1                     | 5                     |
| 30 000 DP RKT        | 1                     | 5                     |
| 35 000 DP RKT        | 1                     | 6                     |
| 40 000 DP RKT        | 1                     | 7                     |
| 50 000 DP RKT        | 1                     | 9                     |

**To link up any underground cistern, you must first mount the cisterns on a reinforced platform that is both horizontal and flat.** Connexions (elbow, T-joints, etc.) and junction tubes must rest supported with **stabilised sand** (dry mix 1 m<sup>3</sup> of sand with 200 kg of cement), to avoid the slipping of junction tubes and links, cracking of welding or crushing of water tight joints.



40 m<sup>3</sup> cistern with straps, SWL (Safe Working Load) 5 tonnes, width 50 mm, anchored with the Plantco Kit (1 EB PLANTCO Base Set + 6 EC PLANTCO Supplementary Kits)

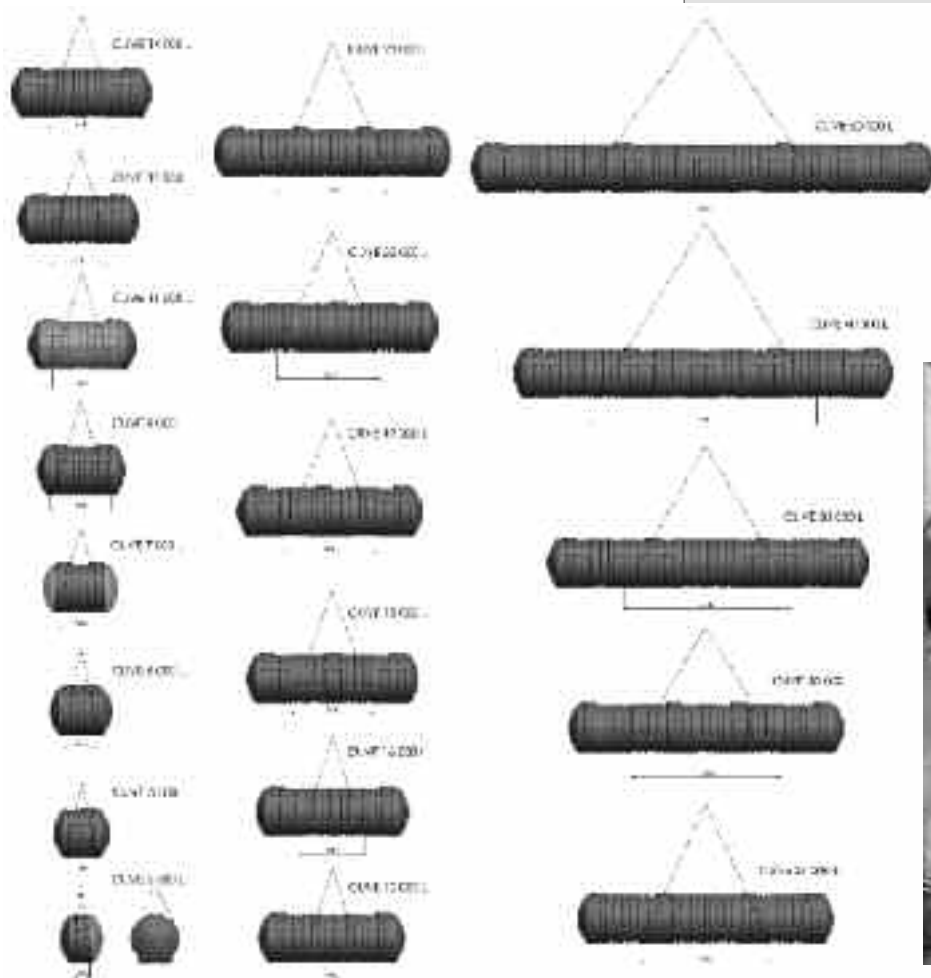
## Guide to above ground cistern placement



In cases where above ground positioning of a unit intended for underground placement (SP SZ, AT135, AT112 and DP ranges), a masonry wall fashioned with a backfill of stabilised sand. The minimum height of the backfill should be 70cm. If in any doubt, please contact our technical service.

**Example : above ground placement of a 9000 litres Double-Skin**

## Sling lifting



Secure with an Actibloc® sling for lifting with a hoist with the help of the diagrams below for a perfect, balanced hold





# Rainwater infiltration bed

Supplying the water table upstream of the cistern's overflow

## Accessories for underground cisterns (sold separately)

In zones not connected to rainwater or waste water networks, it is essential to direct rainwater, coming from the overflow of underground cisterns or directly from the inspection chambers REP 450 connected to downpipes, towards a distribution bed. The dimensions of the rainwater infiltration area are to be defined relative to the permeability of the soil and pluviometry (rainfall characteristics) of the site.

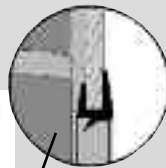
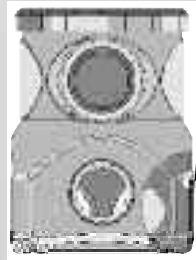
Never connect the rainwater outflow to a septic tank or to an independent waste water filtration bed.

## Plan of a rainwater infiltration bed

|  |   |
|--|---|
| Distribution (inspection) chamber <b>SL-RRINFEP 1 000</b> adjustable for the rainwater infiltration bed                              | <ul style="list-style-type: none"> <li>one (1) high inlet and six (6) lower outlets at the same level,</li> <li>screw-on cap, fully removable,</li> <li>distribution of rainwater in to the infiltration bed</li> </ul>   |
| Looping (inspection) chamber <b>SL-RBOUINFEP 1 000</b> adjustable for the rainwater infiltration bed                                 | <ul style="list-style-type: none"> <li>six (6) inlets/ outlets, low placement is possible,</li> <li>perforated screw-on cap, removable,</li> <li>looping of the rainwater distribution system in the infiltration bed.</li> </ul>   |
| Collect (inspection) chamber for collection of rainwater <b>SL-REP 450</b> at the foot of downpipes from guttering around a building | <ul style="list-style-type: none"> <li>one (1) high inlet equipped with a water flow reduction device, to fit according to the adjoining diagram,</li> <li>three (3) low inlets/ outlets for connection and collect between different inspection chambers REP,</li> <li>full screw-on cap, removable</li> </ul> |
| Inspection (inspection) riser, adjustable and screw-on <b>SL-REHR</b> .  | <ul style="list-style-type: none"> <li>heights 250, 500 and 750mm adaptable to all inspection chambers.</li> </ul>  |



Detail of a joint with silicone-glued lips mounted on a screw-on inspection chamber.



Inspection chamber **RRINFEP 1 000** and **RBOUINFEP 1 000** for distribution and looping of a rainwater distribution bed in ground permeable and fairly permeable (to define)



Riser **REHR 250**



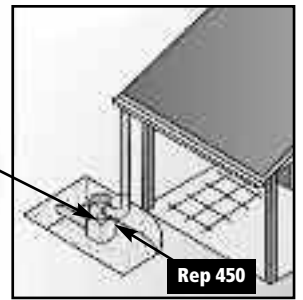
Riser **REHR 500**



Riser **REHR 750**

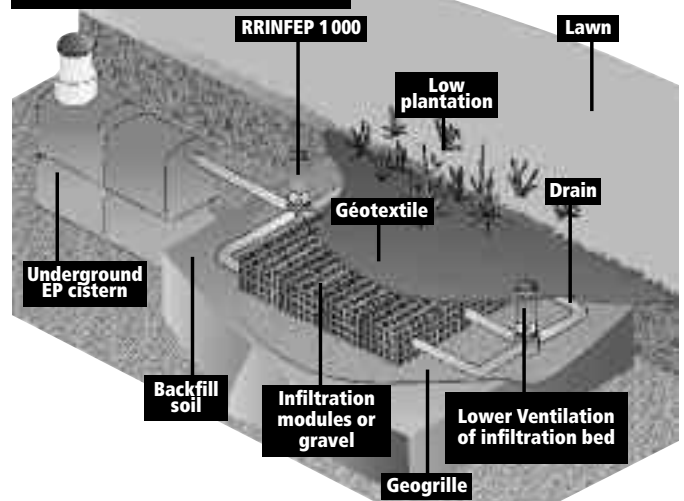


Inspection chamber, **REP 450**, to install at the foot of a downpipe, collecting all rainwater from a building before re-directing it to the filter.



Rep 450

## Plan of a rainwater infiltration bed

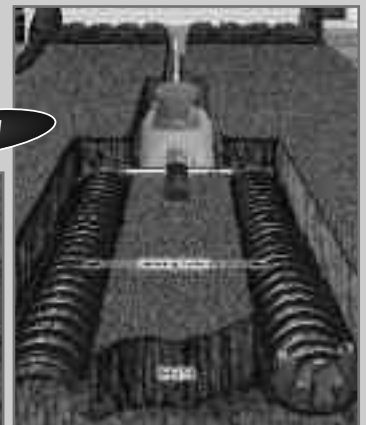


| Type                     | Weight (kg) | Diameter Ø total | Diameter Ø Inlet (mm) | Diameter Ø outlets (mm) | Height total (mm) | Height inlet (mm) | Height outlets (mm) |
|--------------------------|-------------|------------------|-----------------------|-------------------------|-------------------|-------------------|---------------------|
| BOITE REPART INFEP 1 000 | 5           | 320              | 110                   | 110                     | 1 000             | -                 | 20                  |
| BOITE BOU INFEP 1 000    | 5           | 320              | 110                   | 110                     | 1 000             | 20                | 20                  |
| BOITE REPART 450         | 3,250       | 320              | 110                   | 110                     | 450               | -                 | 20                  |
| REHR 250 Rehausse        | 1,250       | 320              | -                     | -                       | 250               | -                 | -                   |
| REHR 500 Rehausse        | 2,000       | 320              | -                     | -                       | 500               | -                 | -                   |
| REHR 750 Rehausse        | 2,850       | 320              | -                     | -                       | 750               | -                 | -                   |

## Why choose an Infiltrator?

Compared with an infiltration bed of sand and drains, the Infiltrator offers high level performance in every way.

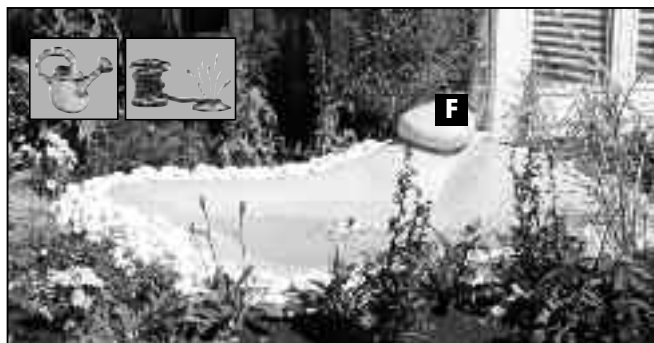
From ease of installation, to system reliability as well as owner satisfaction, the Infiltrator adds cost saving to work and material gains. Perfect for new installations, those undergoing renovation as well as for residential or commercial zones.



# Rainwater tank cladding cover

## Sold separately

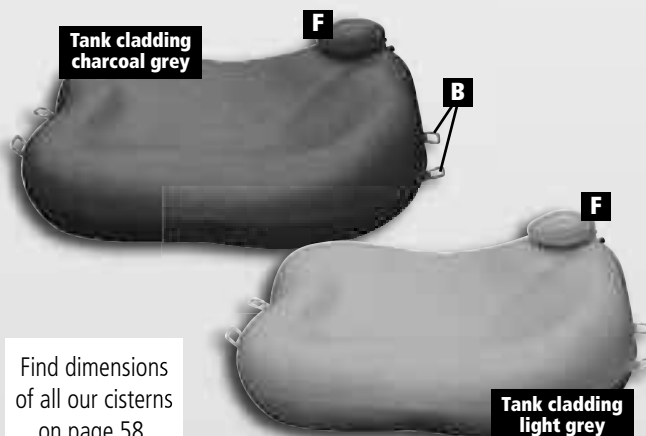
### Alternative harmonious above ground cisterns



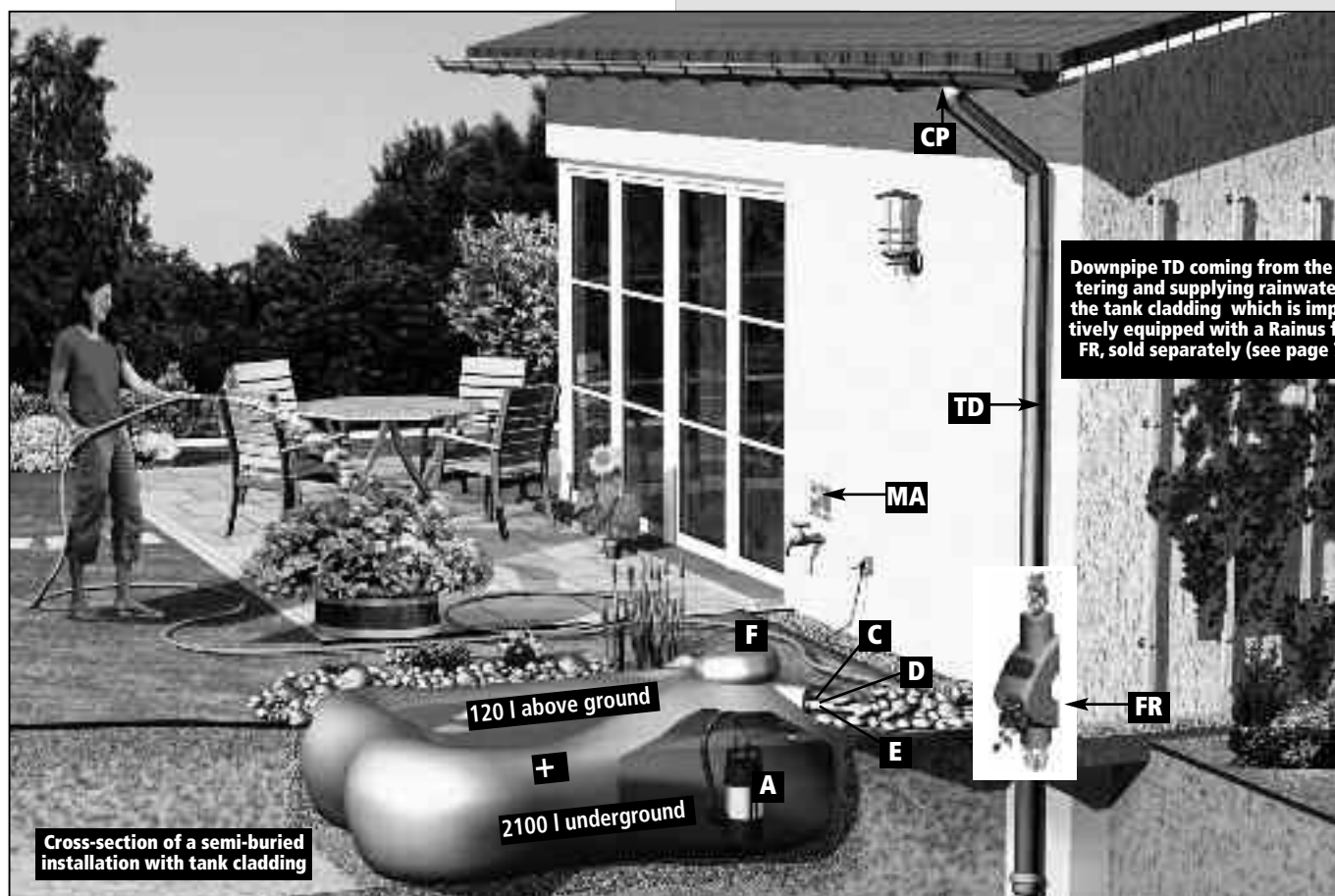
### Demanded

Non-return valve **CAR** on overflow siphon (sold separately)  
Debris trap **CP** on downpipe (sold separately)  
Rainus filter **FR** with grill (sold separately)  
Marked "eau non potable" **MA** (water NOT for drinking) above each bolted decanting tap (supplied with each cistern),  
Child-safety device **S** to fix onto the screw-on cap (sold separately),  
Screw-on cap **T** allowing access for integral cleaning of the cistern

- Tank cover of 120 litres disguising a semi-buried rainwater cistern with a capacity of 2100 l.
- Submerged or surface pump **A**, not supplied (sold separately).
- Tank cladding pre-equipped with:
  - B** 4 handles for movement,
  - C** 1 overflow,
  - D** 1 conduit for the hosepipe, connectable to the pump,
  - E** 1 conduit to supply electricity to the pump,
  - F** 1 cap in the shape of a rock,
  - TD** Downpipe.



Find dimensions  
of all our cisterns  
on page 58.

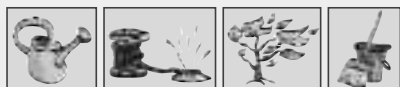


Downpipe TD coming from the guttering and supplying rainwater to the tank cladding which is imperatively equipped with a Rainus filter FR, sold separately (see page 70).

Cross-section of a semi-buried  
installation with tank cladding

# Above ground linkable cisterns, inside and outside, with UV protection

## Green cisterns with UV protection 0, 1 or 2 low outlets



Find sizes on  
page 58

Aqualentz storage cisterns made from extrusion blowmoulding High Density Polyethylene (PEHD)

- light: easy to manoeuvre and put into place due to 2 added handles;
- with 0, 1 or 2 low outlets 1" 1/2 - Ø 40/49mm;
- installed individually or in series.

### Demanded

- CP** Debris trap on downpipe (supplied with the kit "Crédit d'Impôt" (tax credit) with every cistern),
- MA** Marked with "eau non potable" (water NOT for drinking) above each bolted decanting tap (supplied with the kit "Crédit d'Impôt" (tax credit) with every cistern),
- S** Child-safety device to fit on with the screw hook on the screw-on cap (supplied with the kit "Crédit d'Impôt" (tax credit) with every cistern),
  - unalterable: no risk of internal or external corrosion;
  - robust to knocks and monobloc;
  - insensitive to temperature changes and tank fill variations;
  - little sensitivity to light: PEHD treated against UV;
  - installed individually or in series,
- I** Screw-on cap Ø 400 mm allowing access to clean the cistern integrally

### Filtering collector



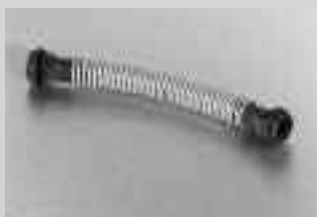
The installation of a **filtering collector** (sold separately) (see page 67) on the downpipe serves as an overflow for above ground cisterns (filtered water is channelled to the cistern and when this is full, water passes back through the filter and is evacuated by the downpipe). It is connected on one of the stoppers



## Connection kit for cistern-collector EP (sold separately)

### Article 32 617 composing:

- 1 ringed tube, 250mm long, Ø 32mm
- 2 screw-on watertight joints Ø 32mm
- 1 manual perforator Ø 32 to pierce the PE



All external above ground storage units equipped with a low outlet must be emptied in winter as frost damages the low outlet. A gutter filtering collector must be installed upstream of all storage units.

Our green storage cisterns allow storage of liquids above ground, not underground, on the inside and outside of buildings.



Above ground cistern 2000 XT BASIC with two (2) manholes and one (1) lower outlet, tap on lower outlet optional, sold separately

Optional two (2) lower outlets

Leave enough space, about 80cm, to allow outlet accessibility



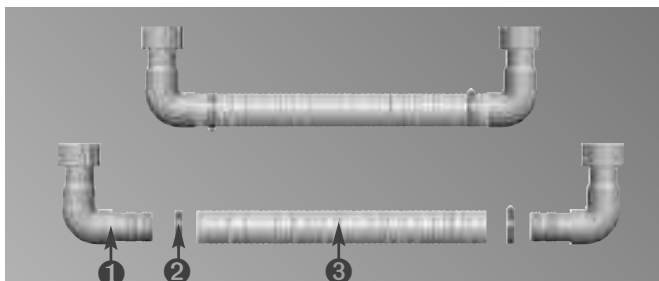


# Linkage of above ground storage, inside and outside

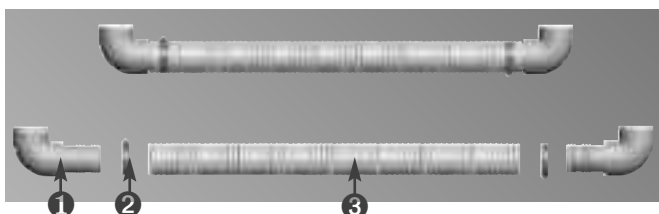
## EB EB Basic system EB for 2 cisterns in series

- ① 2 ribbed elbow joints 90° to screw onto the low outlet
- ② 2 clamping collars
- ③ 1 flexible reinforced translucent tube
- ④ 2 separators

EB-72 STPM/SB PP (art. 31 389) for 1000 and 1500 l  
EB-88 STGM/SB PP (art. 31 391) for 2000 and 3000 l



EB-72 STPM/SB stainless steel (art. 30 186) for 1000 and 1500 l  
EB-88 STGM/SB stainless steel (art. 30 188) for 2000 and 3000 l



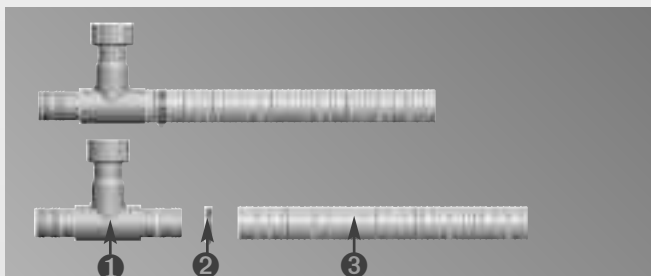
### Fitment in series

- 1 cistern: 1 stainless steel sleeve
- 2 cisterns: 1 EB pipework
- 3 cisterns: 1 EB pipe work + 1 supplementary EC
- 4 cisterns: 1 EB pipe work + 2 supplementary EC
- 5 cisterns: 1 EB pipe work + 3 supplementary EC

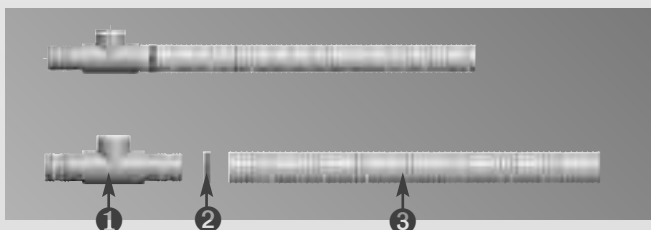
## EC EC Supplementary system EC for each additional cistern of a series

- ① 1 ribbed screw-on T-joint
- ② 1 clamping collar
- ③ 1 flexible reinforced translucent tube
- ④ 2 separators

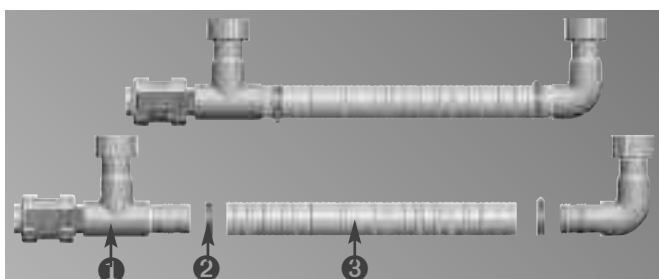
EC-72 STPM/SB PP (art. 31 390) for 1000 and 1500 l  
EC-88 STGM/SB PP (art. 31 392) for 2000 and 3000 l



EC-72 STPM/SB stainless steel (art. 30 187) for 1000 and 1500 l  
EC-88 STGM/SB stainless steel (art. 30 191) for 2000 and 3000 l



## Fitment in series Aquavario Basic + Standard, storage cistern XT Basic + Standard



## EB EB Basic system EB for 2 cisterns in series Aquavario in series

- ① 2 ribbed elbow joints 90° to screw onto the low outlet
- ② 2 clamping collars
- ③ 1 flexible reinforced translucent tube

EB-78 ST/SB PP AquaVario (art. 32 002) with integrated tap 2" for series AquaVario Basic + Standard.  
EB-88 STGM/SB PP Storage XT (art. 33 041) with integrated tap 2" for series Storage XT Basic + Standard.

## EC EC Supplementary system EC for each additional Aquavario cistern of a series

- ① 1 ribbed screw-on T-joint
- ② 1 clamping collar
- ③ 1 flexible reinforced translucent tube

EC-78 ST/SB PP (art. 32 533) for AquaVario  
EC-88 STGM/SB PP (art. 31 392) for Storage XT 2000 and 3000 l



Plan for space of about 80 cm, sufficient to allow access to the low outlet



All external above ground storage units equipped with a low outlet must be emptied in winter as frost damages the low outlet. A filtering collector in the gutter must be installed upstream of all storage units



# Above ground "BASIC" cisterns for outside linking, and with UV protection

**S**



with integrated stainless steel child-safety device **S**,

**MA** Characteristic warning sign MA with the wording « ne convient pas pour l'eau potable » (water NOT for drinking), situated above the bolted decanting tap that comes from the pump or the control module EP, 2 adhesive warning signs delivered with each eligible underground cistern



**Demanded**

**Demanded**

**Non-return valve CAR** Ø 110 mm positioned on the overflow siphon outlet (option sold separately).

**H**



**Option: accessories for placement in series and for taps (sold separately)**

**Tap 2" integrated** in the basic system EB 78 ST/SB PPAV for linking cisterns by the low outlet PP AquaVario.

**G**



**Flow regulation**

**Siphon overflow outlet G** is situated above the evacuated water level for a 2nd energy-free filtration, removing greasy particles (hydrocarbons, oils...) & fine particles (pollen...) by the skimmer effect, with anti-rodent grill in stainless steel (to avoid decomposition after drowning).

**Protection**



Find dimensions of all our cisterns on summary

**New**



**Aquavario "BASIC"**

**530, 750 and 1 050 l.**

**Demanded**

**New**



**Integrated grill filter B**, integrated tubular and horizontal filtering cartridge and removable with « centrifuge » effect, placed upstream of storage for:

- filtration without energy and without coming into contact with the inside of the cistern,
- recuperating close to 90 % of water collected,
- ensuring an auto cleaning without energy,
- backwashing integrated J in the filtering cartridge

Plan to use a (1) cascade grill filter high flow VF1 for roof surface area between 150 and 350m<sup>2</sup> and by sections of 350m<sup>2</sup> for all the cisterns.

**F**

**Demanded**



**Submerged, effective, calm water inlet F** allowing the arrival of pre-filtered water whilst avoiding the re-suspension of sand (sediments) at the same time as oxygenating the container water for a better preservation of water quality and cleanliness. Removal and replacement rapid and easy.

**Safety**



**New**  
**100 % Inox**

**Equipment for the connection Ø 1" D** of an above ground lift pump (option sold separately)..

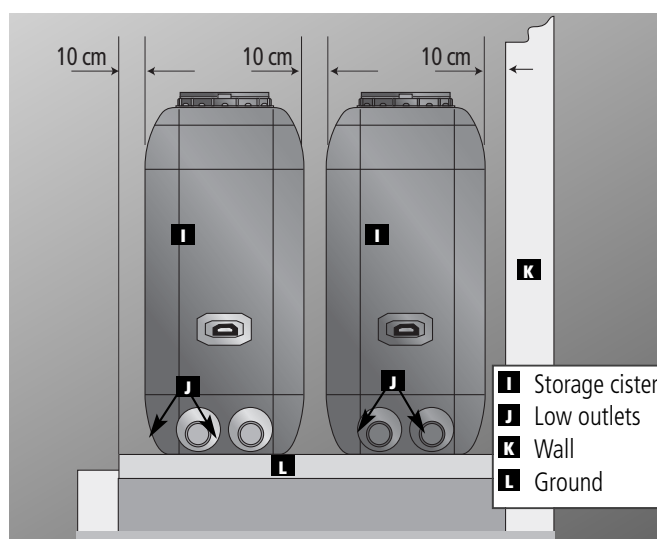
**Flexible floating suction tube E** connectable to a lift pump, equipped with a filtering strainer in stainless steel with an anti-siphon valve and a floater to avoid the suction of bottom sludge and floating matter.



All external above ground storage units equipped with a low outlet must be emptied in winter as frost damages the low outlet. A filtering collector in the gutter must be installed upstream of all storage units



# Above ground linkable cisterns



- I** Storage cisterns
- J** Low outlets
- K** Wall
- L** Ground

## Kit to connect collector-cistern EP (sold separately)

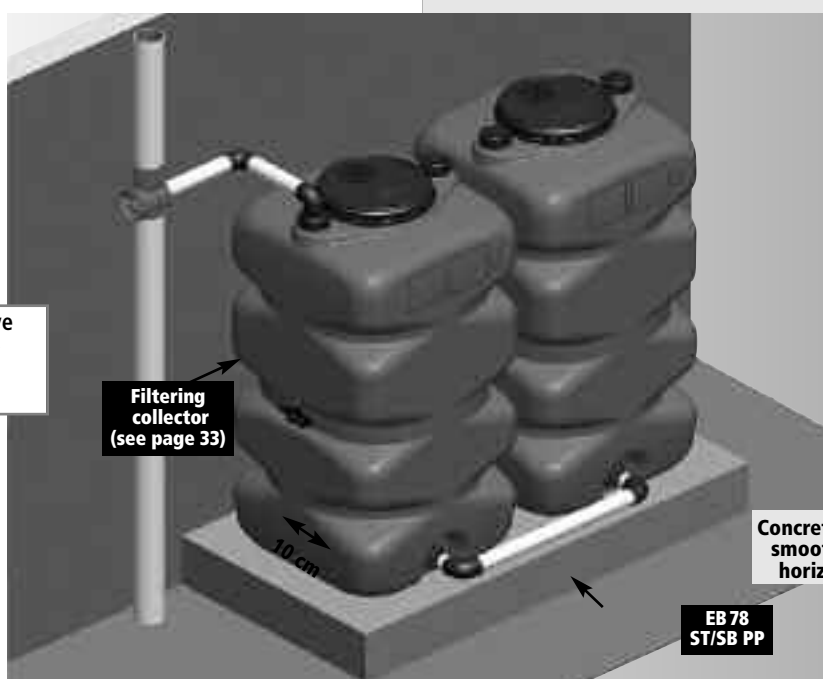
### Article 32 617 comprising:

- 1 ringed tube, 250mm long, Ø 32mm
- 2 screw-on watertight joints Ø 32mm
- 1 manual perforator Ø 32mm to pierce the PE



Important to check the resistance of your pre-stressed floors are sufficient before any installation of above ground cisterns on balconies, over cellars...  
1000 litres = 1000kgs

AquaVario above ground linkable cisterns treated against UV



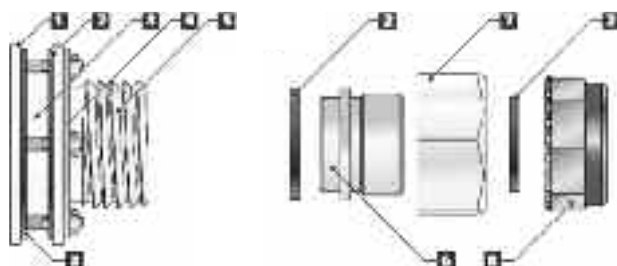
Filtering collector (see page 33)

Concrete floor, smooth and horizontal

EB 78 ST/SB PP

- 1** Threaded insert
- 2** Washer
- 3** Cistern
- 4** Plastic nut
- 5** Screw thread PE
- 6** Stainless steel joint 1"1/2
- 7** Brass nut 2"
- 8** Stopper

## Low outlets in stainless steel for cisterns

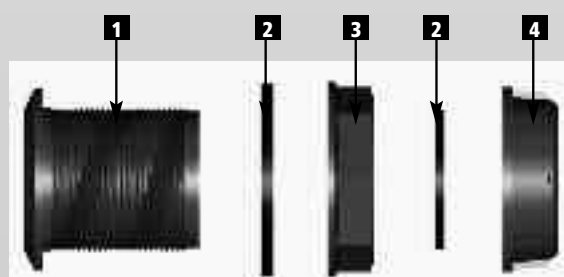


Wall feed through fitting in stainless steel 72 EPDM (art. 30 143)  
Wall feed through fitting in stainless steel 88 EPDM (art. 30 307)

Low outlet in stainless steel EPDM (art. 21372)

## Low outlets PP for cisterns and AquaVario

- 1** Threaded insert with gas screw thread 2"
- 2** Washer
- 3** Plastic nut
- 4** Stopper



Wall feed through gas fitting PP 2" Gaz EPDM (art. 31041)

# Interconnection of 3 cisterns 2000 litres Stainless Steel outlet



1. Unscrew the caps on the 3 cisterns



2. Add watertight tape onto the 1"1/2 male connections (not gas) accessible under the cover of an inspection cap



3. Place the watertight seal on the 1"1/2 male connections (not gas)



4. Insert the 1"1/2 male connections (not gas) in the brass nuts



5. Mount the 1"1/2 male connections (not gas) with the brass nuts to all the elbow joints



6. Screw the 1"1/2 male connections (not gas) with the brass nuts to all the T-joints



7. Screw the elbow joint onto the first and third cistern



8. Screw the T-joint to the second cistern



9. Fix in place the flexible tubes onto all elbow joints, making sure to put on the hose clips



10. Put in place the flexible tube on the T-joint making sure to put on the hose clip



11. Tighten the hose clips with the help of a screwdriver



12. To ensure a watertight join, tightening with a key is recommended



13. Attach the tap onto the lower outlet on the first cistern



# Interconnection of 3 cisterns 2000 litres

## Stainless Steel outlet



1. Unscrew the caps on the 3 cisterns

2. Fix on the watertight seal onto the T-joint + tap



3. Screw the T-joint + tap onto the first cistern



4. Screw the T-joint onto the second cistern, making sure not to forget the watertight seal



5. Screw the elbow joint onto the third cistern, making sure not to forget the watertight seal



6. Mount the T-joint + tap, making sure not to forget the hose clips



7. Slot the flexible tube onto the T-joint making sure not to forget the hose clips



8. Slot the flexible tube onto the elbow joint making sure not to forget the hose clips



9. Tighten the hose clips with the help of a screwdriver





# Above ground external storage, UV-protected conical cisterns

## Above ground storage, treated for UV-protection, small size

- A** Covering lid for cleaning of the conical cistern
- B** Inlet of filtered rainwater
- C** 2 handles for easy placement of empty cistern
  - Option: low outlet in PP (sold separately),
  - Option: tap adaptable onto low outlet in PP, (sold separately),
  - Option: indispensable accessories: filtration collector on downpipes (sold separately).

## Kit to connect collector-cistern EP

(sold separately)

**Article 32 617 comprising:**

- 1 ringed tube, 250mm long, Ø 32mm
- 2 screw-on watertight joints Ø 32mm
- 1 manual perforator Ø 32mm to pierce the PE



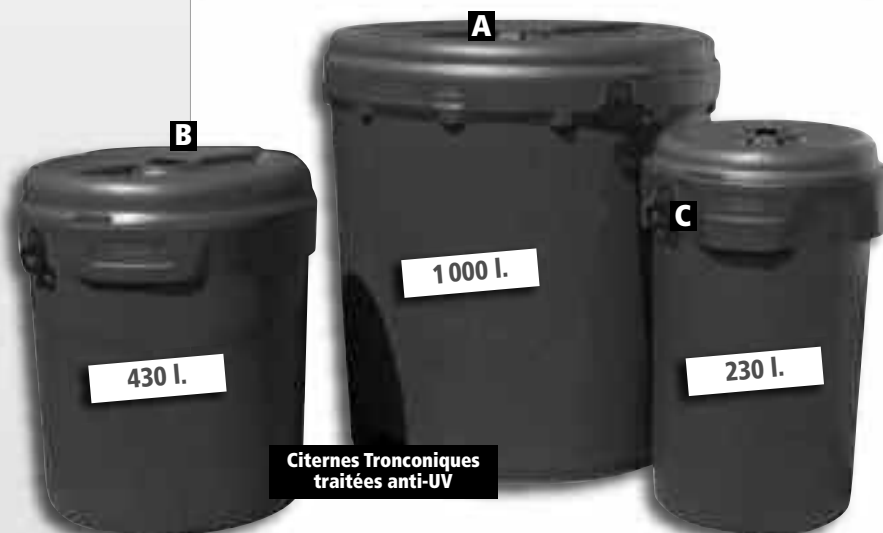
Find dimensions on summary

## Filtering collector

The installation of a **filtering collector** (sold separately) (see page 67) on the downpipe serves as an overflow for above ground cisterns (filtered water is channelled to the cistern and when this is full, water passes back through the filter and is evacuated by the downpipe). It is connected on one of the stoppers



Important to check the resistance of your pre-stressed floors are sufficient before any installation of above ground cisterns on balconies, over cellars...  
1000 litres = 1000kgs



Citernes Tronconiques traitées anti-UV



Wall feed through fitting, tap and outlet pipe (option, sold separately)

**G**

Conical cistern 430 l situated here with filtering collector.

All external above ground storage units equipped with a low outlet must be emptied in winter as frost damages the low outlet. A filtering collector in the gutter must be installed upstream of all storage units.



# Above ground external storage, container tanks

## Container tanks of 1000 litres, plastic platform with 1 low outlet, treated against UV

Container tanks with 1 low outlet SLX Lentz of standard 1000 l come with the following:

- Tank reservoir **F** made by extrusion blowmoulding of High Density Polyethylene (PEHD), treated against UV, colour black;
- Lid, stopper, tap and platform: Injection casting of PEHD;
- Protection cage: automatically soldered steal wire, cladding made by application and powder polymerization, assembled by screwing onto the platform.

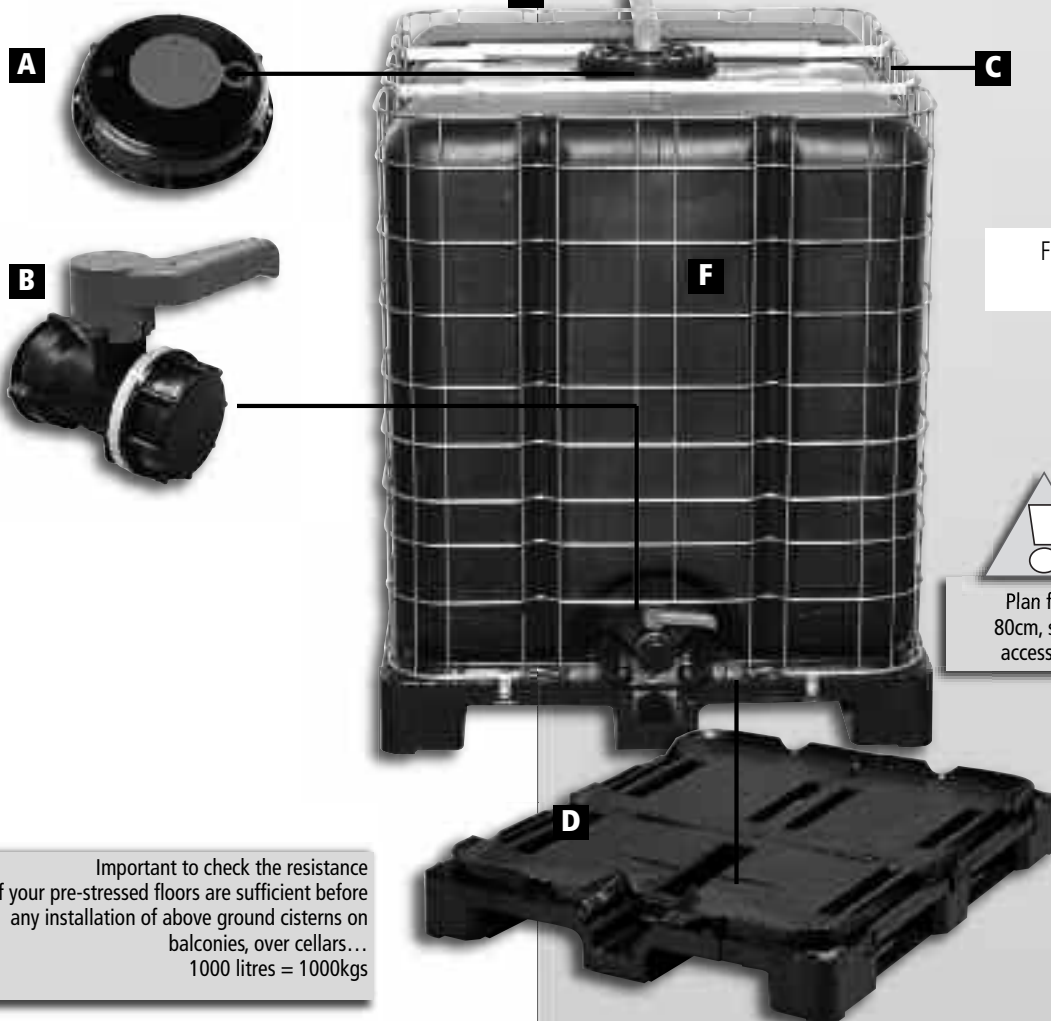
### Equipment:

- A** Screw-on cover lid, diameter 150mm, with 2" opening, ensuring the arrival of rainwater into the container;
- B** Low outlet with check valve tap, black and installed;
- C** Trellis cage in metallic enamel;
- D** Non-decomposable plastic pallet;
- E** Tubes and PVC joints of connections (not supplied, see your usual distributor).

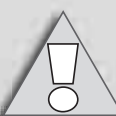


### Filtering collector

The installation of a **filtering collector** (sold separately) (see page 67) on the downpipe serves as an overflow for above ground cisterns (filtered water is channelled to the cistern and when this is full, water passes back through the filter and is evacuated by the downpipe). It is connected on one of the stoppers



Find dimensions on summary



Plan for space of about 80cm, sufficient to allow access to the low outlet

Important to check the resistance of your pre-stressed floors are sufficient before any installation of above ground cisterns on balconies, over cellars...  
1000 litres = 1000kgs

All external above ground storage units equipped with a low outlet must be emptied in winter as frost damages the low outlet. A filtering collector in the gutter must be installed upstream of all storage units.



**SOTRALENTZ**  
HABITAT

# Dimensions

## external and internal rainwater cisterns

### Tank cladding see page 51

| Type        | Article | Weight (kg) | Length (mm) | Width (mm) | Height total (mm) | Height cistern (mm) |
|-------------|---------|-------------|-------------|------------|-------------------|---------------------|
| Light grey  | 32003   | 100         | 2380        | 2080       | 990               | 640                 |
| Basalt grey | 32004   | 100         | 2380        | 2080       | 990               | 640                 |

### Aquavario XT

see pages 52 à 55

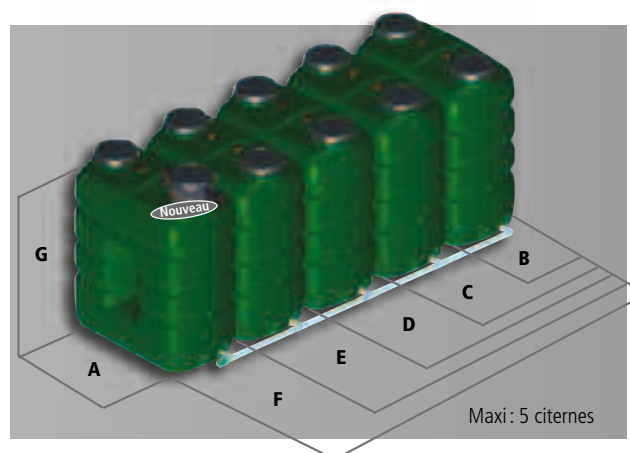
| Type  | Article standard | Weight (Kg) standard | Height standard | Article BASIC | Weight (Kg) BASIC | Height Basic totale | Height IN Basic | Width | Depth |
|-------|------------------|----------------------|-----------------|---------------|-------------------|---------------------|-----------------|-------|-------|
| 530 L | 31839            | 23                   | 1090            | 32693         | 28                | 148                 | 114             | 780   | 780   |
| 750 L | 31840            | 25                   | 1490            | 32694         | 40                | 188                 | 154             | 780   | 780   |
| 1050L | 31841            | 40                   | 2000            | 32695         | 46                | 238                 | 204             | 780   | 780   |

### Green XT cisterns

see pages 52 à 55

| Désignation | Article | Length A (cm) | Width B (cm) | Inlet height Entrée (cm) | Siphon height (cm) | Height without riser (cm) | Height with riser (cm) | Diameter inlet/outlet (mm) | Diameter siphon (mm) | Width C (cm) series of 2 cisterns | Width D (cm) series 3 cisterns | Width E (cm) series 4 cisterns | Width F (cm) series 5 cisterns |
|-------------|---------|---------------|--------------|--------------------------|--------------------|---------------------------|------------------------|----------------------------|----------------------|-----------------------------------|--------------------------------|--------------------------------|--------------------------------|
| 1000        | 33407   | 116           | 73           | 173                      | 143                | 167                       | 207                    | 100                        | 110                  | 154                               | 236                            | 318                            | 400                            |
| 1500        | 33408   | 158           | 73           | 173                      | 143                | 167                       | 207                    | 100                        | 110                  | 154                               | 236                            | 318                            | 400                            |
| 2000        | 32696   | 160           | 88           | 185                      | 155                | 179                       | 219                    | 100                        | 110                  | 186                               | 284                            | 382                            | 480                            |
| 3000        | 32697   | 247           | 88           | 185                      | 155                | 179                       | 219                    | 100                        | 110                  | 186                               | 284                            | 382                            | 480                            |

Approximate values



| Volume (litres) |                                     |                                     | Standard PP          |                      |                      |                      | Option stainless steel            |                                   |                                   |                                   | Standard PP        |                    |                    |                    | Option stainless steel             |                                    |                                    |                                    |  |         |             |            |             |             |  |
|-----------------|-------------------------------------|-------------------------------------|----------------------|----------------------|----------------------|----------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|--------------------|--------------------|--------------------|--------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|--|---------|-------------|------------|-------------|-------------|--|
|                 |                                     |                                     | Internal cistern     |                      | External cistern     |                      | Internal cistern                  |                                   | External cistern                  |                                   | Internal cistern   |                    | External cistern   |                    | Internal cistern                   |                                    | External cistern                   |                                    |  |         |             |            |             |             |  |
|                 |                                     |                                     | With 1 low outlet PP | With 1 low outlet PP | With 1 low outlet PP | With 1 low outlet PP | With 1 low outlet stainless steel | With 1 low outlet stainless steel | With 1 low outlet stainless steel | With 1 low outlet stainless steel | With 2 low outlets | With 2 low outlets | With 2 low outlets | With 2 low outlets | With 2 low outlets stainless steel | With 2 low outlets stainless steel | With 2 low outlets stainless steel | With 2 low outlets stainless steel |  |         |             |            |             |             |  |
|                 | Internal cistern without low outlet | External cistern without low outlet | EPDM                 | NITRILE              | EPDM                 | NITRILE              | EPDM                              | NITRILE                           | EPDM                              | NITRILE                           | EPDM               | NITRILE            | EPDM               | NITRILE            | EPDM                               | NITRILE                            | EPDM                               | NITRILE                            | Stopper complete with 2" gas thread (50/60 mm) | Manhole | Length (cm) | Width (cm) | Height (cm) | Weight (kg) |  |
| 1000            | 20290                               | 30398                               | 23222                | 11778                | 31230                | 31235                | 10339                             | 23227                             | 30403                             | 30408                             | 30162              | 30167              | 31240              | 31245              | 30152                              | 30157                              | 30413                              | 30418                              | 1  | 1       | 116         | 73         | 167         | 47          |  |
| 1500            | 20291                               | 30399                               | 23223                | 11762                | 31231                | 31236                | 10340                             | 23228                             | 30404                             | 30409                             | 30163              | 30168              | 31241              | 31246              | 30153                              | 30158                              | 30414                              | 30419                              | 1  | 1       | 158         | 73         | 167         | 65          |  |
| 2000            | 32656                               | 32666                               | 32658                | 32662                | 32668                | 32672                | 32676                             | 32680                             | 32684                             | 32688                             | 32660              | 32664              | 32670              | 32674              | 32678                              | 32682                              | 32686                              | 32690                              | 2  | 2       | 160         | 88         | 179         | 82          |  |
| 3000            | 32657                               | 32667                               | 32659                | 32663                | 32669                | 32673                | 32677                             | 32681                             | 32685                             | 32689                             | 32661              | 32665              | 32671              | 32675              | 32679                              | 32683                              | 32687                              | 32691                              | 2  | 2       | 247         | 88         | 179         | 114         |  |
| 1000 Basic      | -                                   | -                                   | -                    | -                    | 33407                | -                    | -                                 | -                                 | -                                 | -                                 | -                  | -                  | -                  | -                  | -                                  | -                                  | -                                  | -                                  | 1  | 1       | 116         | 73         | 207         | 53          |  |
| 1500 Basic      | -                                   | -                                   | -                    | -                    | 33408                | -                    | -                                 | -                                 | -                                 | -                                 | -                  | -                  | -                  | -                  | -                                  | -                                  | -                                  | -                                  | 1  | 1       | 158         | 73         | 207         | 71          |  |
| 2000 Basic      | -                                   | -                                   | -                    | -                    | 32696                | -                    | -                                 | -                                 | -                                 | -                                 | -                  | -                  | -                  | -                  | -                                  | -                                  | -                                  | -                                  | 2  | 2       | 160         | 88         | 219         | 88          |  |
| 3000 Basic      | -                                   | -                                   | -                    | -                    | 32697                | -                    | -                                 | -                                 | -                                 | -                                 | -                  | -                  | -                  | -                  | -                                  | -                                  | -                                  | -                                  | 2  | 2       | 247         | 88         | 219         | 120         |  |

### Conical tanks

see page 56

| Type   | Article | Weight (kg) | Diameter (mm) | Height (mm) |
|--------|---------|-------------|---------------|-------------|
| 230 L  | 30667   | 6,5         | 640           | 950         |
| 430 L  | 30666   | 10,5        | 751           | 1080        |
| 1000 L | 31147   | 29,5        | 1160          | 1220        |

Approximate values

### Container tanks see page 57

| Type    | Article | Weight (kg) | Length (mm) | Depth (mm) | Height (mm) | Number per lot |
|---------|---------|-------------|-------------|------------|-------------|----------------|
| 1 000 L | 33076   | 79          | 1000        | 1200       | 1200        | 2 containers   |

Approximate values

# Surface and/or submersible pump stainless steel Steelpump

Steelpump pumps have an integral electronic command unit and work as either as a submerged or ground pump. Entirely automatic, it can be used for numerous applications, in particular to recuperate rainwater. Protection against working dry and anti-blockage system to ensure an operation without worry.

Installation simplicity and easy starting make these VIPER pumps the ideal solution for the user: connect, fill, start. That's it, done.

Adapted to all needs in the following areas:

Water distribution, watering, rainwater recuperation, industry and building. Guaranty 2 years.

The fluids suitable for pumping are: clear water, without solid particles, without abrasive or fibrous matter.

- **Surface pump** for individual removals of water from the cistern.
- **1100 watts:** absorbed power
- **3.2 m³/h:** flow max.
- **4.1 bars:** pressure max.
- **F:** insulation class
- **displacement height max:**  
7 m for the XJE  
0 m for the XMO



Steelpump X-JE



Steelpump X-MO

## Model Steelpump X-JE

- Water recuperation installations
- Water distribution
- Fountains and water jets
- Watering systems
- Draining of reservoirs and tanks
- Filling water reservoirs from wells



Steelpump X-MV

## Model Steelpump X-MO and X-MV

- Water recuperation installations
- Water distribution
- Fountains and water jets
- Watering systems
- Draining of reservoirs and tanks
- Filling water reservoirs from wells
- Industrial cleaning installation
- Installations for water pre-treatment
- Refrigeration installations

| Flow in l/min      | Kw   | Flow in l/min | Pressure (bar) | Weight (kg) | Dimensions |
|--------------------|------|---------------|----------------|-------------|------------|
| Steelpump X-MO 80  | 0,60 | 90            | 33             | 15,5        | 226/477    |
| Steelpump X-MO 100 | 0,75 | 90            | 42             | 16          | 226/477    |
| Steelpump X-MO 120 | 0,90 | 95            | 51             | 17          | 226/477    |
| Steelpump X-JE 80  | 0,60 | 50            | 40             | 14,5        | 226/477    |
| Steelpump X-JE 100 | 0,75 | 55            | 47             | 15          | 226/477    |
| Steelpump X-JE 120 | 0,90 | 59            | 50             | 16          | 226/477    |
| Steelpump X-MV 80  | 0,60 | 90            | 33             | 16,5        | 394/533    |
| Steelpump X-MV 100 | 0,75 | 90            | 42             | 17          | 394/533    |
| Steelpump X-MV 120 | 0,90 | 95            | 51             | 18          | 394/533    |

Approximate values



# Underground storage accessories sold separately, obligatory if used for WCs or washing machines

## 4 compact solutions for the full or partial supply of rainwater in a private residence.

**1<sup>st</sup> case: The Sotralentz rainwater reserve is set away  
from the residence and points of use...**

### **Solution 1 :**

A submersible pump system is a  
silent solution, such as the SPO  
Kit - to be installed in a reserve.



### **Principle of operation:**

The submersible pump, installed in the reserve and equipped with  
floating intaker, is controlled by a pressure control device found in the  
backflow conduit inside the residence. This control device starts up the  
pump as soon as pressure drops when the tap is opened. It also  
protects the pump from running whilst dry. An automatic backup with  
mains water for the reserve can also be arranged with a backup mains  
water kit (consult us).

### **Solution 2 :**

In order to have an automatic and  
protected installation, there is the  
possibility of equipping the Sotralentz  
reserve with a Unilift CC7 lift pump.  
This directly supplies ("force feeds")  
an automatic Grundfos RMQ  
A module (Advanced  
version) installed in the  
residence.



### **Principle of operation:**

The RMQ-A System is an automatic system. It controls the lift pump  
installed in the reserve (to order separately with the external control  
unit). The RMQ-B runs rainwater to all points of use in the house, using  
its integrated booster pump, without any rupture in supply. It also  
controls the standardised switch over (EN1717) to mains water when  
required. The water level of the reserve is indicated.  
However, any operational fault is signalled: micro leaks into the water  
feed, running dry, backflow or penetration in the rainwater reserve...  
Moreover, it is possible to switch over (force) the installation to  
operate on mains water when it is necessary to go into the reserve  
(maintenance)

**2<sup>nd</sup> Cas: The Sotralentz rainwater reserve is close to the  
residence and points of use...**

### **Solution 1 :**

When an automatic operation is favoured, the Grundfos RMQ  
automatic module Basic version (= RMQ-B) ought to be considered. Of  
course, the A version (= RMQ-A) installed without  
lift pump (Unilift CC7) is  
always possible.



### **Principle of operation:**

The RMQ-B System is an automatic system. It sucks up rainwater via a  
floating intaker (not supplied) found in the reserve and runs it to all  
points of use in the house, without any rupture in supply. It controls  
the standardised switch over (EN1717) to mains water when required.  
Version B of the RMQ system does not give any indication of the water  
level in the reserve but protects the installation against any micro-  
leaks or lack of water just as with version A.

### **Solution 2 :**

Only when a filtered rainwater  
supply is required, the simple  
installation of a quite and  
compact booster pump is  
sufficient.



### **Principle of operation:**

The self-priming, MQ booster pump sucks up rainwater via a floating  
intaker (not supplied) found in the reserve. It automatically opens and  
closes the taps. It is furnished with a command and fault signal panel.  
In addition, it protects against running the pump whilst dry, there is a  
non-return valve, an integrated reservoir and an impeller ensuring  
quite operation.

# Underground storage accessories sold separately, obligatory if used for WCs or washing machines

**4 compact solutions for the full or partial supply  
of rainwater in a private residence.**

## Grundfos Kit SPO

The SPO Kit is principally comprised of:

- submersible pump, SPO-B type, fitted with a base for vertical or horizontal installation in the rainwater reserve,
- pressure control device,
- floating intaker.

If the need arises, the rainwater reservoir can automatically changeover from rainwater to mains water supply (consult us).

- Max. flow rate: 4 m<sup>3</sup>/h
- Max. pressure (at zero flow) 5 bar



| Product name | Reflux joint | Weight | Voltage   | P2 (W) | In (A) |
|--------------|--------------|--------|-----------|--------|--------|
| SPO 3-50 B   | 1" 1/4 F     | 15,2   | 1 X 230 V | 750    | 6,10   |

## Grundfos MQ 3-45

Quiet, self-priming, booster pump, composed of a pump, an impeller, a pressurised water chamber and a command system.

- Max. flow rate.: 4 m<sup>3</sup>/h
- Max. pressure (at zero flow): 4.5 bar



| Product name | Suction joint | Reflux joint | Weight | Voltage   | P1 (W) | In (A) |
|--------------|---------------|--------------|--------|-----------|--------|--------|
| MQ 3-45      | 1" M          | 1" M         | 13     | 1 X 230 V | 1000   | 4,5    |

## Grundfos Unilift CC

Submersible pump delivered with non-return valve, 10m cable with plug, float switch

- Max. flow rate.: 10 m<sup>3</sup>/h
- Max. pressure (at zero flow): 0.7 bar

You will need an external monitor unit controlled by RMQ-A (consult us).



| Product name   | Reflux joint               | Voltage   | P1 (W) | In (A) |
|----------------|----------------------------|-----------|--------|--------|
| UNILIFTCC 7 A1 | 3/4" M or 1" M or 1" 1/4 M | 1 X 230 V | 380    | 1,8    |

## Grundfos RMQ 3-45 A (Advanced) Grundfos RMQ 3-45 B (Basic)

The RMQ systems are integrated into a soundproof chamber: a compact booster pump, a monitoring and control unit, a standardised mains water holding tank, three-way valve, a command and signal panel.

- Max. flow rate: 4 m<sup>3</sup>/h
- Max. pressure (at zero flow): 4.5 bar
- Maximum inlet pressure (mains water): 3 bar



| Features:  | RMQ-A | RMQ-B |
|--|-------|-------|
| Automatic or manual change-over from rainwater/mains water | YES   | YES   |
| Holding tank automatically refreshed (every 30 days)       | YES   | NO    |
| Readout of rainwater level in the tank                     | YES   | NO    |
| Acoustic fault alarm                                       | YES   | NO    |
| Visual fault alarm   | YES   | YES   |
| Signal "clean tank filter" (without sensor)                | YES   | NO    |
| Backup pump option (installed in the reserve)              | YES   | NO    |
| Backflow sensor option (in case of sewer overflow)         | YES   | NO    |

| Technical specifications                       |   |
|--|---|
| Maximum height to highest point of consumption | 15 m  |
| Supply voltage                                 | 1 X 230 V                                   |
| Power input during standby                     | Approx. 2.5 W                               |
| Rated power input                              | Approx. 1000W (900W at 3 m <sup>3</sup> /h) |
| Enclosure class                                | IP 42 - B                                   |
| Weight   | 24 kg                                       |
| Ambient temperature                            | Min. 0°C - Max. +45°C                       |
| Mounting location                              | Indoors, wall                               |
| Dimension of suction and discharge pipes       | 1" (min. suction)                           |
| Dimension of overflow                          | DN 70                                       |

RMQ-A accessories:

- Exterior control unit (consult us),
- Emergency overflow with integrated backflow detector (consult us),
- Unilift CC7 lift pump (see opposite).

# Leaf collector (sold separately)



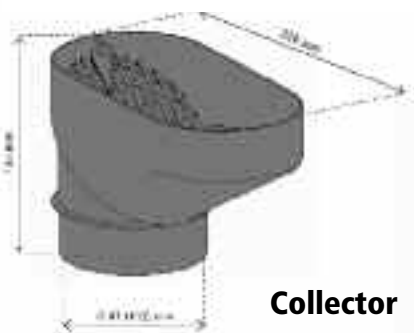
## Leaf collector

(Grey: Art. 31 280 - Brown: Art. 31 281)

For use in following areas:

- Pre-filter upstream of the Sinus filter or the basket VF1 filter.
- Large impurities (leaves, moss...) removed and collected upstream of the filters by means of a basket.
- Protection against blocking of rainwater outflow pipes thus avoiding dangerous climbs onto the roof to clean the guttering.
- Easy to install and maintain.
- Coloured: grey and brown.
- Materiel: PP.

## Contents of package



**Collector**

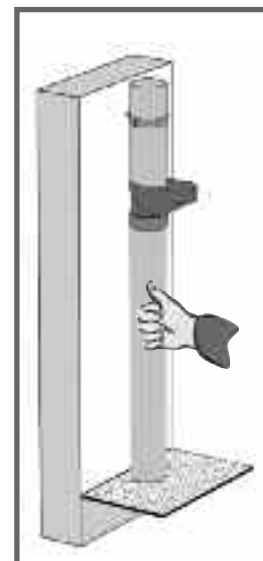
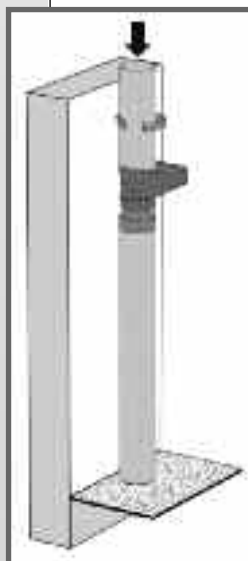
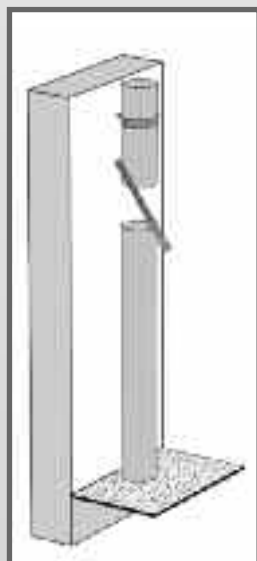
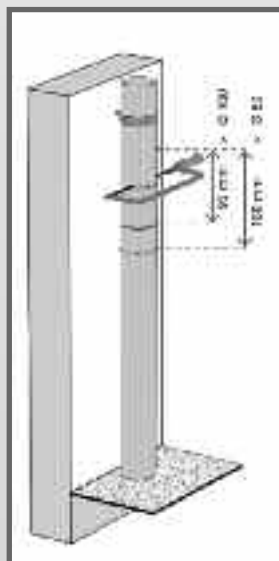


**Reducer**

## Diameter 100 or 80 mm

- Large impurities filtered and extracted from the rainwater by veins in the conduit.
- Leaves, moss and large impurities collected in a basket.
- Pre-filtered rainwater pours into the drainpipe towards a Sinus or VF1 filter.

## Installation



## Maintenance

Remove leaves, moss etc that have collected in the basket on a regular basis



## Characteristics

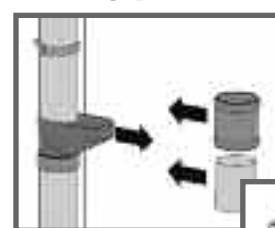


70 m²

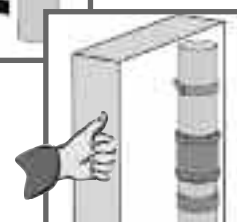


Ø 80-100 mm

## During periods of frost



Remove leaf collector and replace with a sleeve



# Filtering collector (sold separately)

## Filtering collector

(grey: Art. 31276 – brown: Art. 31277)

For use in the following areas:

- Rainwater filtered and stored in rainwater cisterns as well as smaller rainwater butts
- As an overflow

## Diameter 70 and 50mm

- Supplied with an adaptor for Ø 32mm pipes
- 2 reducers supplied for different diameter collection and down pipes
- Colours: grey and brown
- Material: PP

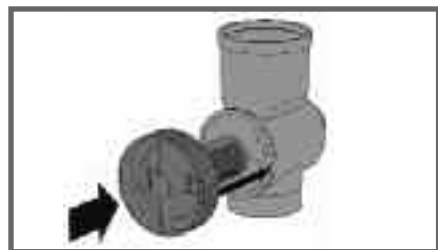
## Use

- Impurities are expelled from the sides of the filter cartridge into a receiving pipe
- Filtered rainwater continues towards the storage cistern



## Maintenance

- Turn the cartridge to the left so as the handle is in a vertical position
- Withdraw the filter cartridge
- Clean with water
- Lubricate the O-ring before reinserting the cartridge into the collector.

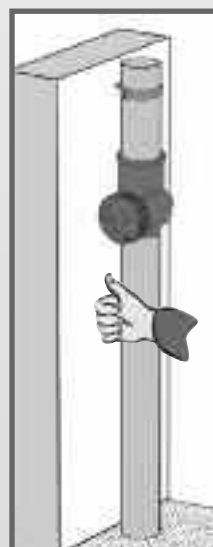
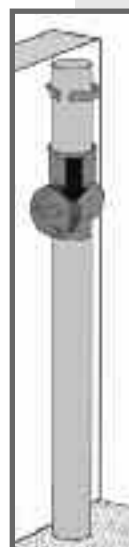
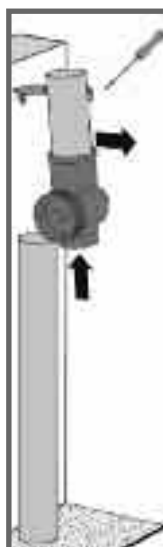
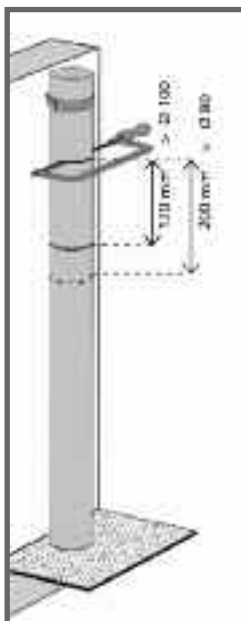


## During periods of frost

Move the filtrating cartridge to a closed position.

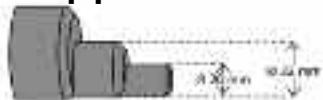


## Installation



## Contents of package

### Collect pipe reducer



## Characteristics



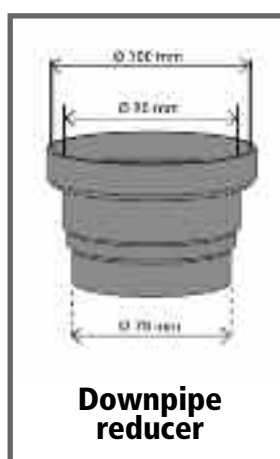
70 m²



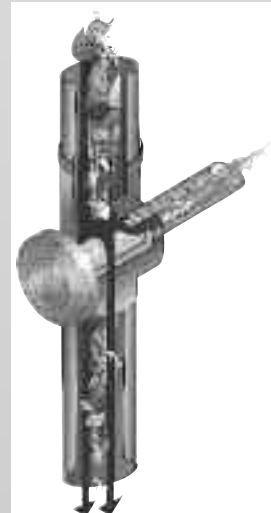
Ø 80-100 mm



Collector



Downpipe reducer





# Rainus grill filter (sold separately)

## Rainus grill filter (Art. 31 274)

For use in the following areas:

- Rainwater grill filter is installed on the downpipe
- Reliable filtration of impurities,
- Easy installation and maintenance.
- Ejection of impurities towards the front, filtered water pours into the downpipe
- Ideal for installations which have no other filter yet placed.

## Use

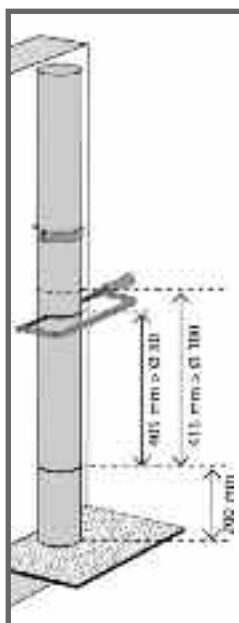
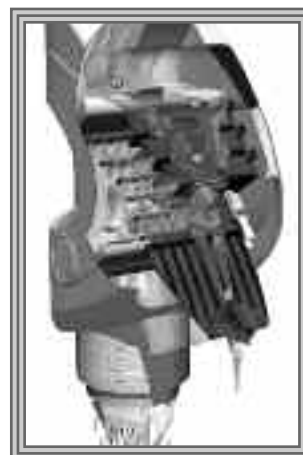
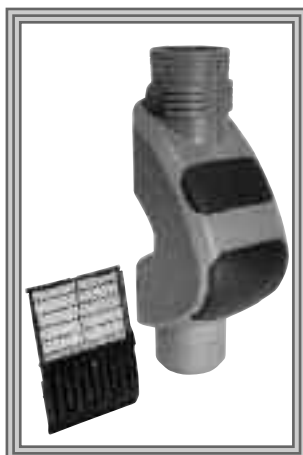
- Slowing and stabilization of rainwater flow into the cistern with use of baffles.
- Overflow uniformly channels rainwater across a « cascade ».
- Cascades separate leaves, moss and large impurities and moves them to the front of the filter.
- Fine sieve under the cascades eliminate finer particles, up to 550 µm.
- Particles also moved to the front by channelling surfaces.
- Filtered rainwater directed to the cistern.

**Diameter 100 or 80 mm**

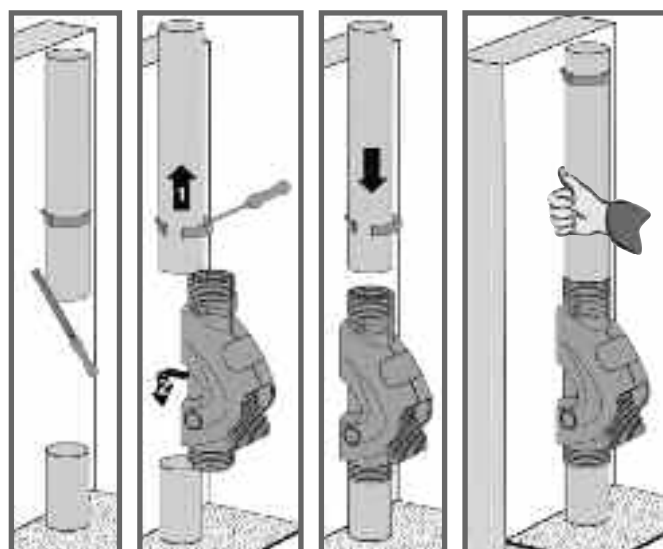
## Maintenance

If too much water is projected outwards

- Lift up the tongue and pull out the sieve with its frame.
- Clean the sieve with water
- Reinsert the sieve with its frame into the guide rail (clicks when fitted in correctly)

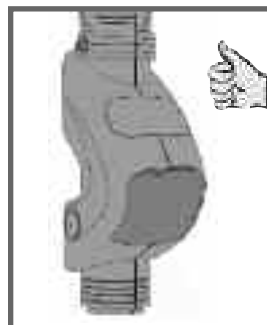
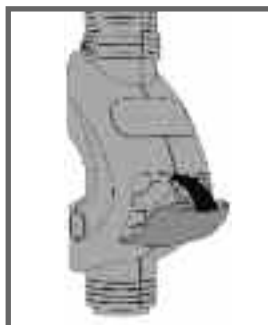
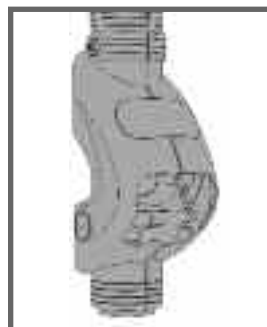


## Installation



## During periods of frost

Retirer le tamis et refermer le clapet jusqu'au printemps.



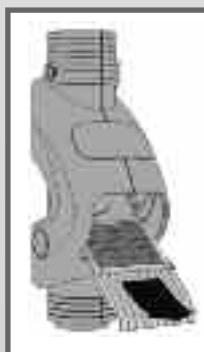
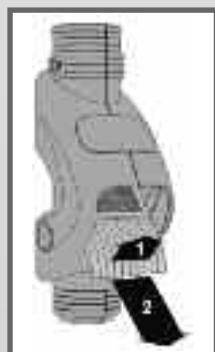
## Characteristics



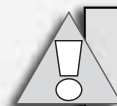
70 m²



Ø 80-100 mm



# Filtration and treatment of water Cintropur®



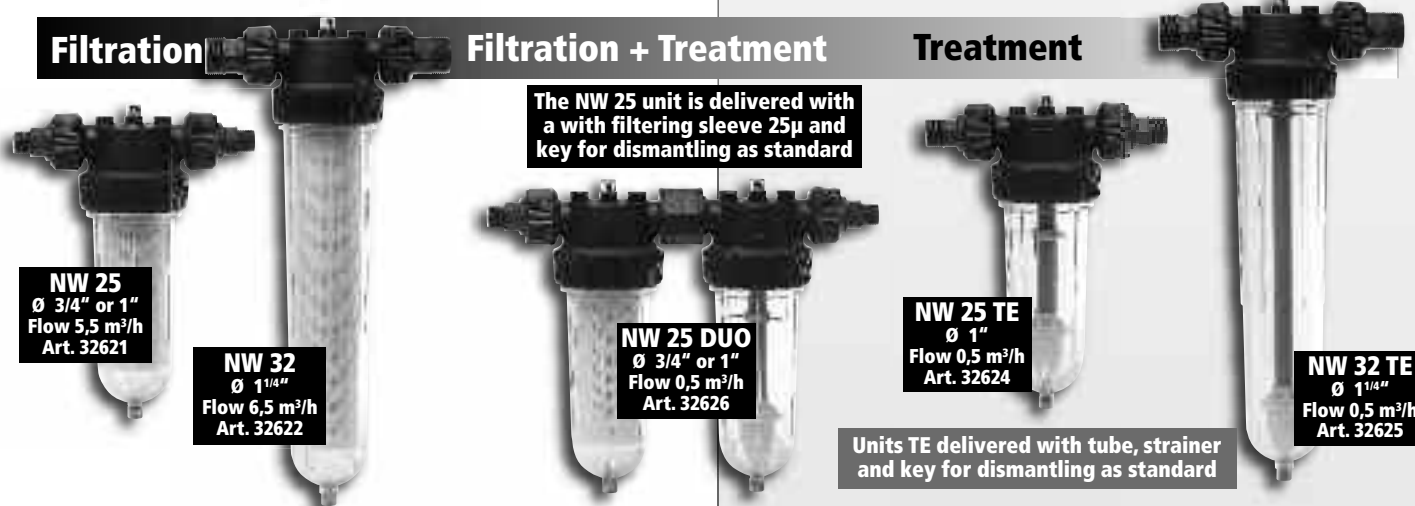
## IMPORTANT NOTICE

This device does not render water drinkable

### Filtration

### Filtration + Treatment

### Treatment



The NW 25 unit is delivered with a with filtering sleeve 25µ and key for dismantling as standard

Units TE delivered with tube, strainer and key for dismantling as standard

### Uses for NW25 and NW 32

**Domestic** : Protection of sanitation networks supplied with distribution water, rain or well water; filtration of water before softening, reverse-osmosis or pre-treatment by an ultraviolet lamp.

**Industrial**: Protection of sanitation networks, machine tools for production and any industrial device pre-treating water. Filtration of water before use in high pressure cleaners (100 to 200 bar) or very high pressure (1500 to 2500 bar).

**Agricultural**: Filtration of watering networks; Filtration of drinking water for animals; Filtration of rainwater and well-water. The water pre-treatment model (TE), CINTROPUR is fitted with a tube and strainer to accept different products.

**Polyphosphates, silicates, silico-phosphates**. Effective up to 60°C, these products are used to reduce harmful effects and encrusting tartar. Protection of new sanitation installations against rust is another well-known application.

#### Advantages :

- high flow;
- reliable head loss;
- centrifugal pre-filtration with the cyclone effect;
- professional unit, robust and reliable;
- rapid and easy drainage from below
- unique system, ecological and inexpensive filtering sieves;
- continuous view of the filling filtering sieve (transparent dome).

**Activated carbon CINTROPUR SCIN**. The large volume of pores and large exchange surface area made of extruded activated carbon mean this is an excellent choice for improving taste, removal of odours, reduction of chlorine, ozone and micro-pollutants such as pesticides and other dissolves organic substances.

### Water treatment

#### Advantages to using CINTROPUR TE + activated carbon CINTROPUR SCIN

- 1 High quality of the activated carbon used in the CINTROPUR TE filters (NW 25 TE = 0.85 l and NW 32 TE = 1.7 l) guaranteeing optimal life duration and yield. Slower the flow rate, better the result;
- 2 Longevity of a filter charge depends on use: advised for drinking water, 3 months (or 20 000 filter volumes), to a minimum change of every 6 months;
- 3 Due to the internal mechanism of the filter, there is a maximum contact time between the water and activated carbon, which guarantees optimal pre-treatment efficacies;
- 4 Guarantees the user one of the best activated carbons available on the market with a very high degree of adsorption;
- 5 The recharge of activated carbon is a good price; packaging specially studied for easy filling of the filter.

| Technical data               | Domestic   |         |             |          |          | Industrial |          |          |          |
|------------------------------|------------|---------|-------------|----------|----------|------------|----------|----------|----------|
| Type of filter               | NW 25      | NW 32   | NW 25DUO    | NW 25 TE | NW 32 TE | NW 50      | NW 62    | NW 75    | NW 50 TE |
| Diameter of connection       | 3/4" ou 1" | 1 1/4"  | 3/4" + 1"   | 1"       | 1 1/4"   | 2"         | 2 1/2"   | 3"       | 2"       |
| Flow average (m³/h)          | 5,5        | 6,5     | 0,5*        | 0,5*     | 0,5*     | 20         | 25       | 30       | 1*       |
| ΔP = 0,2 bar                 |            |         |             |          |          |            |          |          |          |
| Service pressure (bar)       | 10         | 10      | 10          | 10       | 10       | 10         | 10       | 10       | 10       |
| Pressure max. usage (bar)    | 16         | 16      | 16          | 16       | 16       | 16         | 16       | 16       | 16       |
| Temperature max.             | 50° C      | 50° C   | 50° C       | 50° C    | 50° C    | 50° C      | 50° C    | 50° C    | 50° C    |
| Weight (kg)                  | 1,3        | 1,8     | 2,6         | 1,3      | 1,8      | 3,2        | 3,2      | 3,2      | 3,2      |
| Filtering sieve original fit | 25 µ       | 25 µ    | 25 µ        | —        | —        | 25 µ       | 25 µ     | 25 µ     | —        |
| Volume of bell               | —          | —       | 2 x 0,85 l  | 0,85 l   | 1,70 l   | —          | —        | —        | 4,35 l   |
| Surface area of filtration   | 450 cm²    | 840 cm² | 1 x 450 cm² | —        | —        | 1250 cm²   | 1250 cm² | 1250 cm² | —        |

\*Value with activated carbon CINTROPUR SCIN

# Cintropur® industrial Filtration and Pre-treatment

## Filtration

**NW 50**  
Ø 2"  
Flow 20 m³/h  
Art. 32632

**NW 62**  
Ø 2 1/2"  
Flow 25 m³/h  
Art. 32634

**NW 75**  
Ø 3"  
Flow 30 m³/h  
Art. 32635

## Treatment

### IMPORTANT NOTICE

This device does not render water drinkable

**NW 50 TE**  
Ø 2"  
Flow 1 m³/h  
Art. 32633

## Composition

- **Pressure gauge 0-20 bar 1/4"**  
Indicates network pressure. At  $\Delta P$  1 bar, change filtering sieve, minimum 3x per year. Art. 32627.
- **Bayonet mount system**  
Device fixing the bell to the head of the filter (4 sprockets in the head engage with the 4 bell sprockets with a rotating movement). Allows easy and rapid handling of the bell.
- **Helix centrifuge**  
Original fit on all versions of units with filtering sieve, the helix causes the entering water to flux cyclonically, precipitating large particles to the base of the bell.
- **Drain valve 1/2"**  
Causes impurity deposits to outflow under pressure because of the cyclone effect in the helical centrifuge. To screw-on UNIQUELY by hand (without tool). Art. 32630. (optional)
- **Brass joints 2" removable.**  
2 part joints of the same diameter inlet/outlet, watertight O-ring fitting. Allows rapid and easy fitment /removal of the filter. Art. 32636. (optional)
- **Wall attachment.**  
Wall bracket in stainless steel to fix on the filter head with the pressure gauges. Industrial filters. Art. 32637. (optional)
- **Domestic filters. Art. 32628. (optional)**

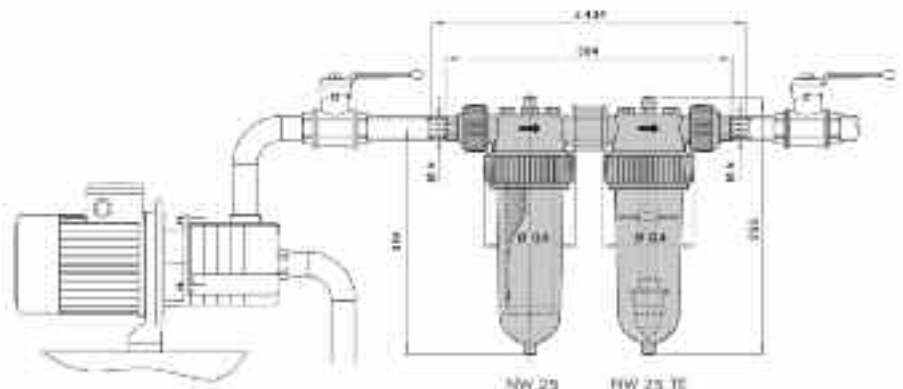
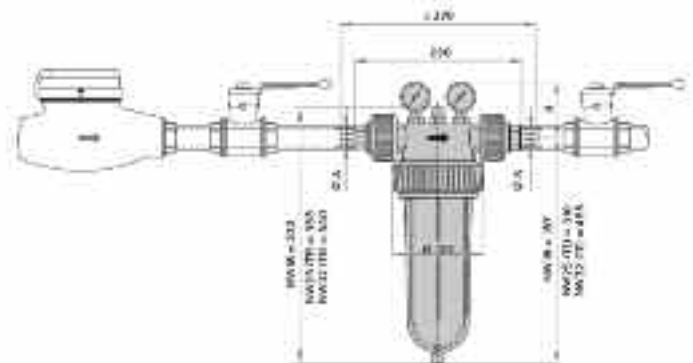
- **Black bell.** Avoids formation of algae during direct exposure to sun rays. (optional)  
- Domestic: Art. 32620  
- Industrial: Art. 32638.
- **Device TE.** Device interior of TE filter; used to pre-treat water with activated carbon or polyphosphates; can also be placed in the NW62 and NW75. Art. 32639.

### RECHARGES

- **Filtering sieve** (25µ, 100µ, 150µ conditioned by 5pc.). Non washable. Art. 32623.
- **Activated carbon.** Quality CINTROPUR SCIN. Contained in the bell NW50TE, NW62TE, NW75TE equal to 3.4 litres.  
- Delivered in a container of 3.4 litres. Art. 32640

## Installation diagrams

| Symbols   | A(ø)      | B     |
|-----------|-----------|-------|
| NW 25     | 1"        | ± 77  |
| NW 32     | 1 1/4"    | ± 77  |
| NW 25 DUO | 3/4" + 1" | -     |
| NW 25 TE  | 1"        | -     |
| NW 32 TE  | 1 1/4"    | -     |
| NW 50     | 2"        | ± 117 |
| NW 62     | 2 1/2"    | ± 117 |
| NW 75     | 3"        | ± 117 |
| NW 50 TE  | 2"        | ± 70  |



**New**

# Filtration and UV Platinum disinfection Eureka

**Platinum  
Eureka 36 only**



**The Eureka treatment unit is essential filtered water before using it inside the habitation**

## Principles and characteristics

Prior to being stored in your cistern, rain-water passes the atmosphere, your roof, and collects bacteria, viruses, fungi and algae. It comes into contact with droppings of cats and birds, leaves and lichens.

Additionally, the disinfection unit EUREKA, based on purely physical principles, destroys the micro-organisms prone to cause illness. This treatment is achieved by the germicidal UVC rays. Its characteristics are:

- stainless steel treatment chamber 316l
- mounted on compact platinum
- equipped with a electrical box integrated with the platinum
- flow-rates above expressed according to a coefficient of transmission at 98% over 1cm, for a germicidal dose delivered at 40 mJ/cm<sup>2</sup> at the end of the lamp's life and under those conditions least favourable to the unit
- transparent quartz sheath with 253.7 nm wavelength
- UVC low-pressure lamp of the type single-base PHILIPS (9000-hour life)
- × warning light indicating the light is working with a counter for the lamp's hours-in-use
- supply: 220/230V with cable and earth
- on/off switch
  - fused
  - electronic ballast
  - adaptation panel for the UVC cell
  - wrapping optimised and recyclable
  - materials conform ACS and CE

## Options

- protection cap
- control cell UVC
- potential supply with solar panels
- large range of mechanical filters available
- flow-rate limiter so as to guarantee the UVC dose
- Security electrovalve in case of electricity cuts or failure of the lamp

## Advantages

- Optimization of the flow restriction / treatment efficacy
- Simplified assembly/disassembly of the unit due to:
- An electric box integrated with the platinum
- Single base design of the germicidal lamp
- Flexibility and security of use:
- Conforms to the strictest norms specifying size and design for a complete disinfection of the water (following the Ministry of health's circular of 19 January 1987).
- Minor maintenance costs (changing the lamp once a year)
- Without side effects
- Salt composition unaltered
- No chemical residues created

**Platinum Eureka  
36 equipped with  
all options**



**Material conforms to the  
ministry of health's circular  
of 19 January 1987**

## IMPORTANT NOTICE

This device does not  
render water drinkable

**1 YEAR MANUFACTURER'S WARRANTY,  
EXCLUDING WEARING PARTS  
(UV LAMP, NON-MAINTENANCE, ETC.)**

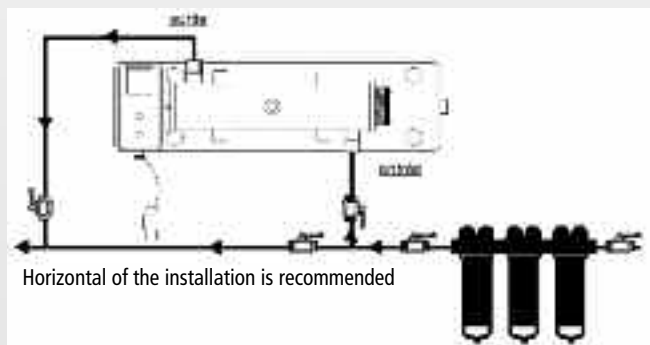




# Filtration and UV Platinum disinfection Eureka

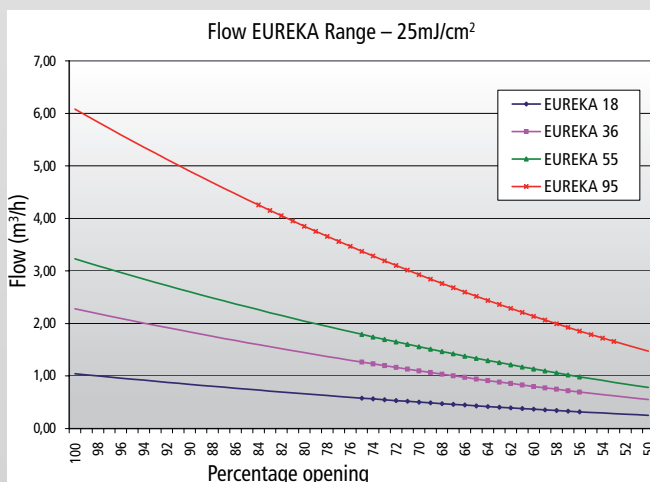
## Operation of UV water-treatment unit

1. Connect the unit to the water supply (lamp MCR not connected)



**Check the stuffing box is adequately tightened before letting water in. Make certain all joints are water-tight before using the system under pressure.**

2. Let in some water, and allow the water-pressure from the cistern to build PROGRESSIVELY
2. Purge any air contained in the unit by opening one of the inlets/outlets
3. adjust to the desired flow



| Type        | Measurement (mm) |     |     |    |     |     | Flow (m³/h) at 98% 40 mJ/cm² - 25 mJ/cm² | Power consumption (W) | Lamp reference | E/S      |
|-------------|------------------|-----|-----|----|-----|-----|--|-----------------------|----------------|----------|
|             | A                | B   | C   | D* | E   | F   |  |                       |                |          |
| EUREKA 18 W | 600              | 165 | 290 | 94 | 115 | 440 | 0.6 - 1                                  | 38                    | 18LMCR18W      | ¾" G opp |
| EUREKA 36 W | 600              | 165 | 290 | 94 | 115 | 440 | 1.4 - 2.2                                | 40                    | 18LMCR36W      | ¾" G opp |
| EUREKA 55 W | 715              | 165 | 420 | 94 | 115 | 580 | 2 - 3.1                                  | 60                    | 18LMCR55W      | ¾" G opp |
| EUREKA 95 W | 715              | 165 | 412 | 94 | 115 | 580 | 3.6 - 5.8                                | 110                   | 18LMCR95W      | 1" G opp |

Approximate values

## Operation of the platinum electrode

1. Connect the electrical supply to the unit

**The electrical cap must imperatively have an earth pin, connected to good and permanent earth**

2. Mount the lamp and connector
2. Turn on the electricity supply
3. Check that the warning light of the lamp LCR lights up
4. The counter starts to turn
5. Wait for the temperature of the lamp to climb (5 to 10 minutes)
6. Start use

## GENERAL SECURITY

- NEVER LOOK DIRECTLY AT THE UVC LAMP
- NEVER USE THE ELECTRICAL SYSTEM WITHOUT WATER IN THE SYSTEM
- PLAN FOR THE WATER TO EXIT AT THE TOP
- A CIRCUIT BREAKER IS ESSENTIAL IF NOT ALREADY PRESENT
- WE ADVISE FILTRATION UPSTREAM OF THE UNIT

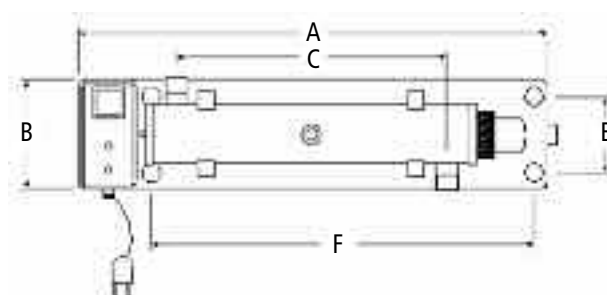
## GENERAL OBSERVATIONS

The bactericidal effects of UV treatment may vary depending on:

- The types of bacteria encountered
- The flow of water you use
- The ambient temperature of the water prior to treatment

Consequently when assessing the performance of the unit it is essential to take into consideration its capacity as compared to the use it is being put to.

**1 YEAR MANUFACTURER'S WARRANTY,  
EXCLUDING WEARING PARTS  
(UV LAMP, NON-MAINTENANCE, ETC.)**



# Filtration and UV Platinum disinfection Eureka

## Maintenance schedule

Changing or cleaning the quartz sheath

1. Cut the water supply to your installation
  2. Turn off the electricity supply
  3. Check that the warning light "base of the lamp" (4) is off
  4. Uncap the connector (6) of the lamp to the electrical box
  5. Unscrew the plastic collar
  6. Take out the lamp from the UV disinfection chamber
  7. Unscrew the chrome stuffing box
  8. Take out the quartz sheath (1) from the disinfection chamber taking care at all times not to touch the core of the unit
  9. Clean or replace the quartz sheath
  10. Adjust the cone joint (2) of the sheath
  11. Carefully reposition the new quartz sheath
  12. Screw the stuffing box into place
  13. Reposition the new lamp
  14. Tighten the plastic collar
  15. Cap in the lamp's lead to the electrical box
- Turn on the electricity supply

## CHANGING THE LAMP

1. Cut the water supply to your installation
  2. Turn off the electricity supply
  3. Check that the warning light "base of the lamp" (4) is off
  4. Uncap the connector (6) of the lamp to the electrical box
  5. Unscrew the plastic collar
  6. Take out the lamp from the UV disinfection chamber
  7. Reposition the new lamp
  8. Tighten the plastic collar
  9. Cap in the lamp's lead to the electrical box
  10. Turn on the electricity supply
- Check that the warning light on the base of the lamp is on

## CHANGING OR CLEANING THE UV INSPECTION PANEL

1. Partially empty the disinfection chamber to allow the panel to be removed
2. Take off the white panel (20&21) with an Allen key d2
3. Remove entirely the inspection panel with a coin turning anti-clockwise
4. Clean the lens (17), then change the cone joints (16)
5. Continue to reassemble using the cone joints provided, taking care to check that the sequence of parts corresponds to the schematic above and that the stainless steel washer (18) is correctly centred in the inspection panel.
6. Moderately tighten the inspection panel's nut (19) using a coin.
7. Replace the UVc probe or white panel

## BREAKDOWN SOLUTIONS

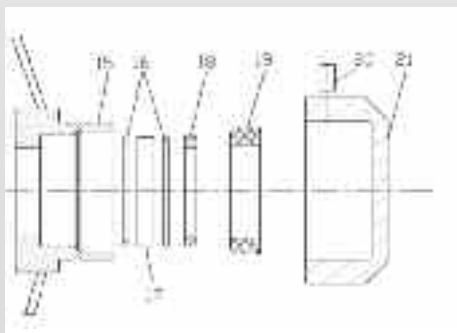
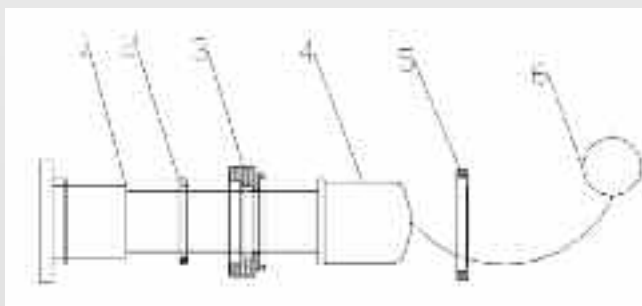
- Leak from the stuffing box – tighten it
- The quartz breaks during assembly – Check that the quartz is correctly centred with respect to the tank before tightening the stuffing box
- Leak from the inspection panel – check the two joints are in place and re-tighten the inspection panel
- The lamp doesn't work – check the connection of the lamp
- The lamp's warning light doesn't light-up – Make certain that the platinum is correctly supplied with 220-230V – make sure that the fuse is sound – make sure that the lamp is properly connected

**In cases of difficulty contact your supplier**

## WARNING:

**The bactericidal effect of lamps tails off after 9000 hours of use. It is thus essential to replace the lamp, failure to do so will expose you to a risk of bacterial infection, as the germicidal dose is no longer being delivered.**

**WE ADVISE FILTRATION UPSTREAM OF THE UV TREATMENT UNIT**



**1 YEAR MANUFACTURER'S WARRANTY,  
EXCLUDING WEARING PARTS  
(UV LAMP, NON-MAINTENANCE, ETC.)**

# Filtration of dirty water

## Hydrosystem® 400 and 1000

**2 filter sizes, 400 and 1000 offering different cleaning performances**

### 1 - HYDROSYSTEM 400

Small rainwater filtration unit in PE for installation directly in the ground

**HYDROSYSTEM 400 ROOF** (Art. 32608)

Allows filtration of rainwater coming from standard roofs, up to 175 m<sup>2</sup>

**HYDROSYSTEM 400 METAL** (Art. 32611)

For metallic roofs up to 100 m<sup>2</sup>.

**HYDROSYSTEM 400 PARKING** (Art. 32609)

for light traffic zones, with daily traffic of vehicles up to about 5000 vehicles / day, up to 100 m<sup>2</sup>.

**HYDROSYSTEM 400 ROAD** (Art. 32610). For heavy traffic zones, with daily traffic of vehicles above 5000 vehicles / day, and other similar types of zone, up to 100 m<sup>2</sup>.

### 2 - HYDROSYSTEM 1000

Rainwater filtration unit in PE see below, and for direct installation in an inspection chamber for rainwater filtration, with interior diameter 1 000 mm.

**HYDROSYSTEM 1 000 ROOF** (Art. 32604)

Allows filtration of rainwater coming from standard roofs, up to 1 000 m<sup>2</sup>

**HYDROSYSTEM 1 000 METAL** (Art. 32607)

Allows filtration of rainwater coming from metallic roofs (lead, zinc, copper...) up to 500 m<sup>2</sup>

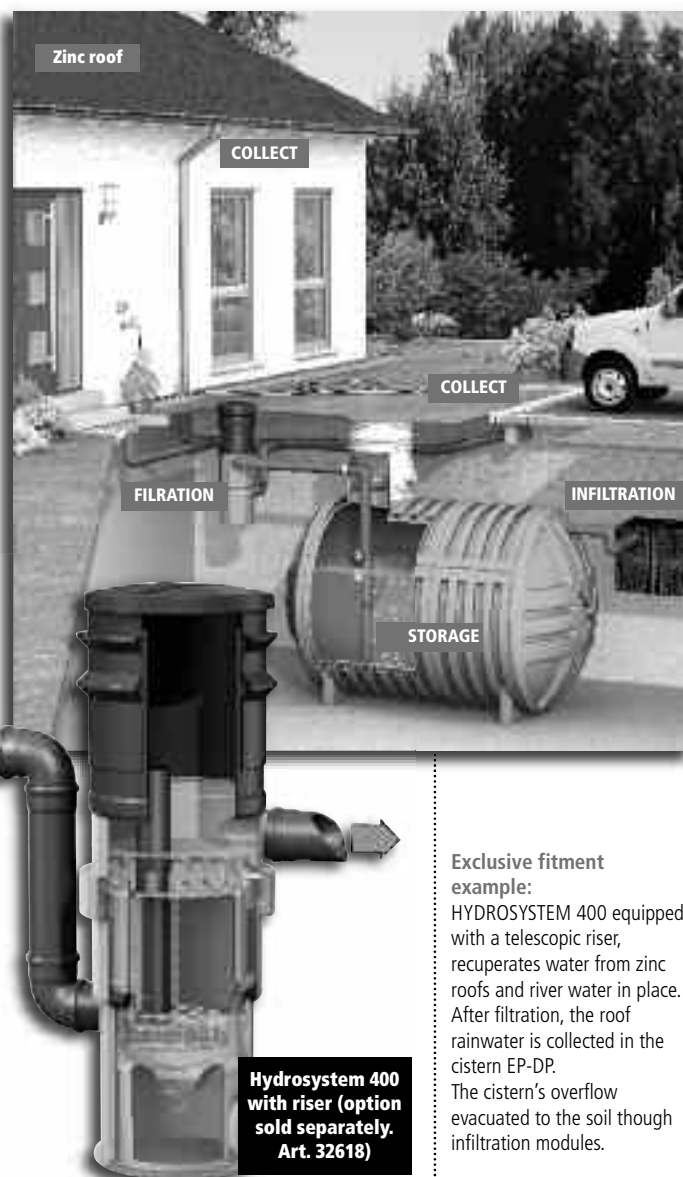
**HYDROSYSTEM 1 000 PARKING** (Art. 32605)

Allows filtration of river water coming from traffic zones of 500 m<sup>2</sup> maximum with light traffic, less than 5000 vehicles/day

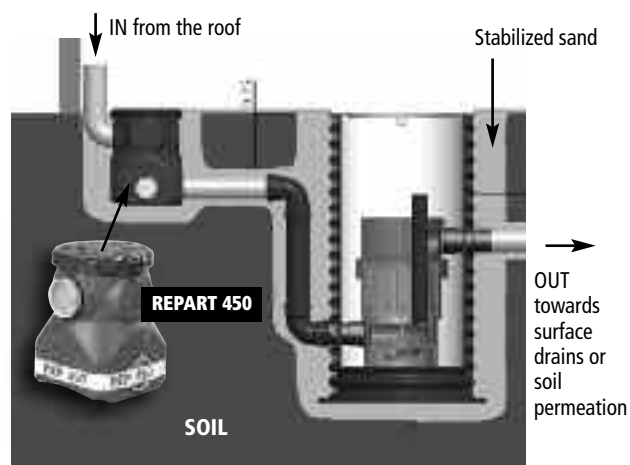
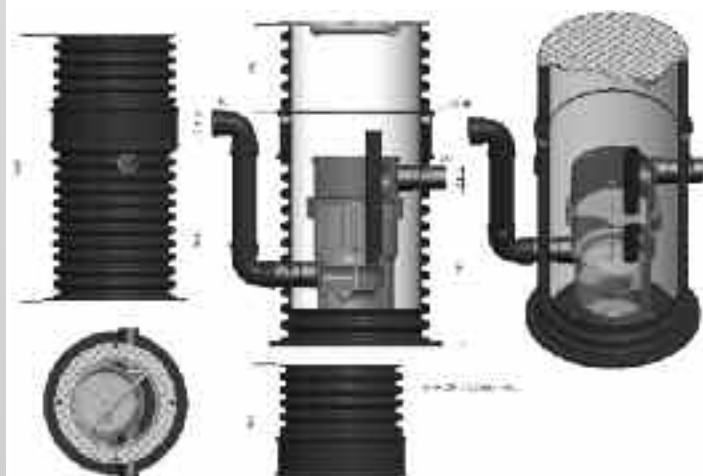
**HYDROSYSTEM 1 000 ROAD** (Art. 32606)

Allows filtration of river water coming from traffic zones of 500 m<sup>2</sup> maximum with heavy traffic, above 5000 vehicles/day

The quality of rainwater filtration obtained allows direct ejection into the surface water system. The collected rainwater undergoes, through passage across filtering elements, the process of successive filtration: sedimentation, adsorption, filtration then chemical precipitation.



## Installation instructions for Hydrosystem 400 and 1000 roofs and metal surfaces



# Filtration of dirty water

## Hydrosystem® 400 and 1000

These filters treat rainwater, due to the action of four (4) types of elements, collected from:

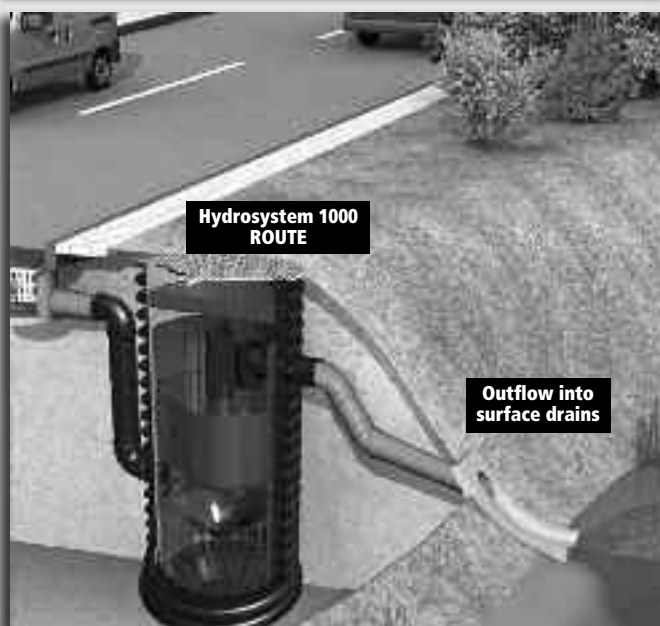
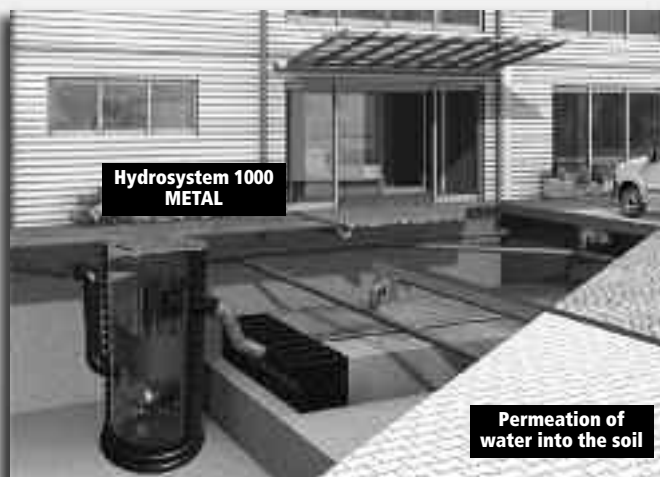
- up to 1000 m<sup>2</sup> of metallic roof,
- road traffic from 300 to 5000 vehicles/day, etc.
- metallic roofs (zinc, copper, lead,...),
- roofs with vegetation,
- roofs collecting water in polluted zones,
- light vehicles car parks. Heavy weight vehicle car parks, engines, airport tarmacs...are excluded
- roadways with light and average traffic, though heavy traffic is excluded.

In fact, water can not be collected in the cases described above unless they first undergo successive pre-treatment by:

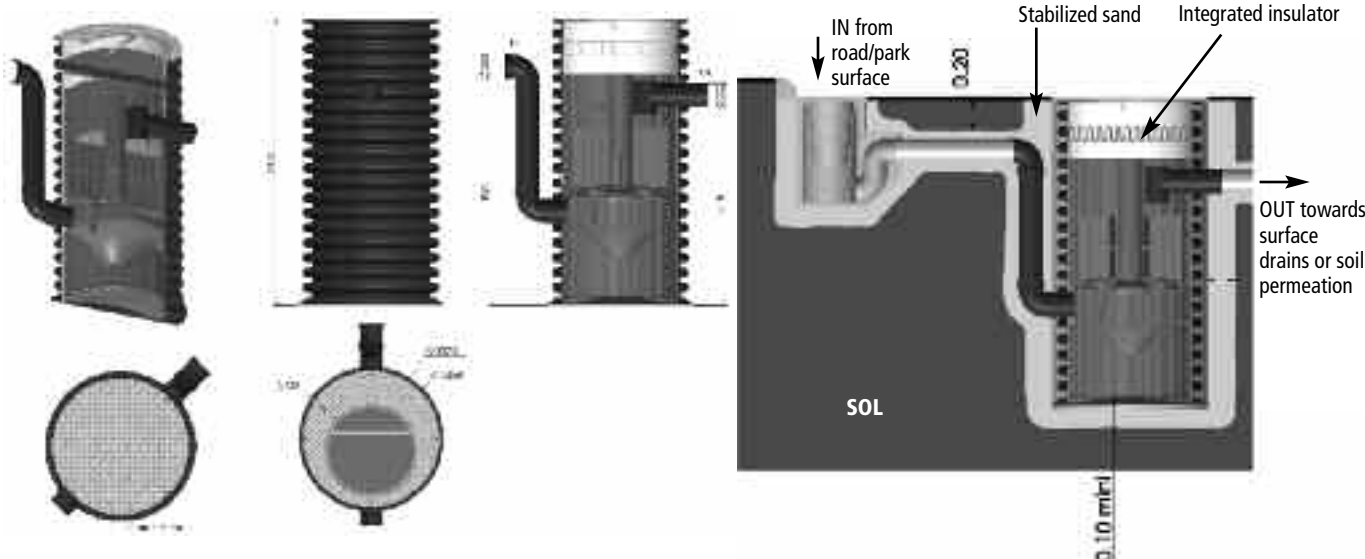
- sedimentation with Vortex effect,
- filtration, adsorption, precipitation and co-precipitation of heavy and toxic metals,
- hydrocarbon recuperation.

Delivery and fitting of the well module is described below for pre-treatment of rainwater from roof run-off.

- To be fitted into prepared excavations, with a system of anchorage (tie-down rings, threaded eyes, snap hooks).
- Use flexible and water-tight connections for the rain-water inflow pipes.
- Use flexible and water-tight connections for the rain-water outflow pipes.
- Type of installation Hydrosystem 1000 metal. Total surface area that can be connected: 500 m<sup>2</sup>
- Structure of the well is made of prefabricated concrete parts and an insert made of polyethylene with hydrodynamic separator, sludge collector and filtration unit to clean roof run-off rainwater, well structure Hydrosystem DN 1000 according to DIN 4034, part 2
- Diameter of well collar: d = 1000/ 625 mm; height: h = 300 or 600 mm
- Diameter of riser: d = 1000 mm; height: h = 1000 mm with DN connection (outflow)
- Diameter of riser: d = 1000 mm; height: h = 500 mm with DN connection (inflow)
- Diameter well base with sludge collector: d = 1000 mm; height: h = 550 mm
- Diameter of PE conduit with hydrodynamic separator with accommodation for the filtration unit (4 elements): d = 980mm; height: h = 2000 mm
- Option: diameter of riser for modifications in height: d = 1.000 mm; height: h = 250/500/1000 mm
- Depth total: \_\_\_\_\_ m (without risers for modifications in height),
- Weight total: \_\_\_\_\_ kg



## Installation instructions Hydrosystem 400 and 1000 roads and car parks



Serial number – date of fabrication



# Rainwater

**Above and below-ground storage,  
Pipe-work and accessories,  
Private individuals, collectives and businesses**

**Complete range  
Solid and durable  
for 25 + years underground  
Food grade quality  
Saving drinking water  
and fresh water resources  
Unlimited water storage  
Integrated equipment  
Accessories (sold separately)  
Guarantee: 1 year for UV filtration  
Guarantee: 2 years for accessories  
and above ground cisterns  
Guarantee: 10 years  
for underground cisterns  
Developed and production  
under ISO 9001:2008  
Development, production,  
purchasing advice, assistance,  
quality, partnership**



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Information contained in this guide concurred with the available information at time of going to press.

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